BARTEC

ATEX Zone 2 and 22 **UL Class I, II, III Division 2**

Mobile Computing

User Manual

Mobile Computer MC 95xx^{ex}-NI, Type B7-A29.-..../.....

Document No. B1-A290-7D0001 Issue: 10. March 2011/Rev. 1

BARTEC

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Technical subject to change!

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Notes on this manual

Read carefully before putting the devices into operation.

The user manual is a constituent part of the product and must be kept in the direct vicinity of the device and accessible at all times to installation, operating and maintenance personnel.

It contains important notes, safety instructions and test certificates which are necessary for perfect functioning when the devices are being operated and handled. It is written for technically qualified personnel.

Familiarity with and the technically perfect implementation of the safety instructions and warnings described in this manual are preconditions for safe installation and commissioning. The safety notes and warnings given in this documentation are given in a general way and only qualified personnel will have the necessary specialised know-how to interpret and implement them correctly in specific cases.

Qualifications of the personnel working with the devices

The user manual is written for all people who carry out assembly, installation, commissioning and service work on the product, whereby the directives and standards 99/92/EC, EN 60079-17, EN 60079-19 for the gas area and EN 61241-17 and EN 61241-19 for the dust area must be observed.

Changes to the document

BARTEC reserves the right to alter the contents of this document without notice. No guarantee is given for the correctness of the information.

In the event of a legal dispute, the “General Terms and Conditions” of the BARTEC group shall apply in addition.

The respective up-to-date versions of data sheets, manuals, certificates, EC Declaration of Conformity may be downloaded from the “Ex Visualisation and Communication Systems” product page at www.bartec-group.com or ordered directly from BARTEC GmbH.

Handling the Product

The documents are currently available in English.

The product described in this manual has been tested and left the factory in perfect condition as regards meeting safety requirements.

To maintain this condition and ensure that this product operates perfectly and safely, it may be used only in the manner described by the manufacturer. Appropriate transportation, suitable storage and careful operation are also essential for the perfect and safe operation of this product.

Use for the Intended Purpose

Note

The versions, components, screens and windows illustrated in this User Manual are examples only and can deviate from the actual display.

The information treated in this User Manual relates to the explosion protected version of the MC 95xx^{ex}-NI Series.

This User Manual contains all important information concerning explosion protection. In addition, the original user manuals and product information from Motorola are also available and these contain information about handling and commissioning. In the event of information overlap, the information in this User Manual is valid and replaces the Motorola information.

Documentation Set

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- **User manual for the MC 95xxex-NI mobile computer series** (part no. B1-A290-7D0001). This user manual describes the use of the explosion protected version of the MC 95xx^{ex}-NI mobile computer series.
- **Technical data sheet** for the explosion protected version of the MC 95xx^{ex}-NI mobile computer series - This Technical Data Sheet describes the most important ex technical and general technical data.
- The current version of this user manual is available upon enquiry.

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The documentation set for the MC9500-K provides information corresponding with the respective user requirements and comprises:

- **MC9500-K Brief Overview** (Part no. 72-118504-xx.)
  This user manual describes the commissioning of the mobile computer MC9500-K.
- **MC95XX Series Windows Mobile® 6.1 Regulatory Guide** (Part no. 72-118502-xx)
- **Mobility Services Platform User Guide** (Part no. 72E-100158-xx)
- **Wireless Fusion Enterprise Mobility Suite User Guide for Version 3.00** (Part no. 72E-122495-xx)
- **User manual for the MC9500-K mobile computer series** - This user manual describes the use of the MC9500-K mobile computer series.
- **User manual for integration of the MC9500-K mobile computer series** (Part no. 72E-118503-xx). This user manual describes the setup of the MC9500-K mobile computer, including accessories.
- **Microsoft® Applications for Windows Mobile® 6 User Guide** (Part no. 72E-108299-xx). This user guide describes the use of Microsoft applications.
- **Enterprise Mobility Application Guide** (Part no. 72E-68901-xx)
  This user guide describes the use of example applications developed with Enterprise Mobility.

– **EMDK Help** file **(Enterprise Mobility Developer Kit) -** This Help file comprises API information about writing applications, available under:

http://www.motorola.com/enterprisemobility/support

- **Latest Active Sync-Software,** available under: http://www.microsoft.com.
- The current version of the Motorola documentation is available under:

http://www.motorola.com/enterprisemobility/manuals

For Software Installation and Adjustment Possibilities refer to the Symbol/Motorola manual:

www.motorola.com/Business/US-EN/Enterprise+Mobility

under: - Support - Get Product Manuals - Product Manuals - Mobile Computers - MC95xx

Safety Instructions

Read carefully before putting the devices into operation.

Safety instructions and warnings are specially highlighted in this manual and marked by symbols.

The safety instructions and warnings are assigned to the individual work steps. Careful handling and consistent observation of the instructions will prevent accidents, personal injuries and damage to property.

The adherence to all directions and safety instructions in this manual is a precondition for safe working and the correct handling of the device.

The graphic representations in these instructions serve to show the information being described and are not necessarily true to scale and they may deviate slightly from the actual construction of the device.

Marking

Particularly important points in these instructions are marked with a symbol:

Danger!	Non-observance leads to death or serious physical injury. The necessary safety measures must be taken.
Caution!	Warning of damage to property and financial and penal disadvantages (e.g. loss of guarantee rights, liability etc.).
Attention!	Important instructions and information on preventing disadvantageous behaviour
Note	Important instructions and information on effective, economical and environmentally compatible handling.

Configurations

This user manual refers to the following configurations:

Confi-guration	Wireless	Display	Memory	Data acquisition option	OS	Key-pad
MC9590^{ex} -NI	WLAN: 802.11 a/b/g WPAN: Bluetooth-Version 2.1 with EDR GPS: SiRF III	3.7"-VGA Colour display	256 MB RAM/1 GB Flash memory	1D Laser scanner	Windows Mobile® 6.5 Classic	Keypads: See below
MC9596^{ex} -NI	WLAN: 802.11 a/b/g WPAN: Bluetooth-Version 2.1 with EDR WWAN: HSDPA GPS: SiRF III			1D /2D Imager 1D Laser scanner and camera or	Windows Mobile® 6.5 Professional	
MC9598^{ex} -NI	WLAN: 802.11a/b/g WPAN: Bluetooth-Version 2.1 with EDR WWAN: EvDO Rev. A GPS: SiRF III			1D /2D Imager and camera	Windows Mobile® 6.5 Professional	

Keypad

The following keypads are available:

- Alpha Primary
- Telephony Numeric
- Calculator Numeric
- Alpha Numeric

You can find specific information about the keypads under Technical Data or in the Motorola documentation.

1. Product Description

1.1 Definition

The **MC 95xx^{ex}-NI** is a 3.5G Worldwide Enterprise Digital Assistant (EDA) device and it has been specially modified by BARTEC for use in the hazardous areas:

- **ATEX Zone 2 and Zone 22** or
- **Class I, II, III Division 2**

This means that even in the hazardous area the user can avail of the extensive communication options that are already standard in other areas.

Its ergonomic design and easy operation make it an ideal support for fast data availability in enterprise processes. A keyboard is available in different versions for manual data capture.

The integrated 1D or 1D/2D scan engine for capturing bar codes and optionally a 3-megapixels camera is available as another data capture option. The ergonomically mounted scan triggers on the MC 95xx^{ex}-NI allow data to be captured easily in one-hand operation.

Several technologies are available for data communication with other systems and company divisions.

- Wireless 3.5G WWAN (WWAN)
- Wireless LAN (WLAN),
- Wireless PAN (WPAN) (Bluetooth)
- IrDA connection

These modules, which are integrated in the device, allow seamless transmission of voice and data with easy integration into the company's network.

Other advantages in its use are the rugged construction, easy-to-read 3.7" VGA colour display with touch technology and high-performance lithium ion battery.

Fast process execution is ensured by the Intel PXA320@ processor with 806 MHz, which is integrated in the MC 95xx^{ex}-NI, and an easy development of applications is facilitated by the Microsoft® Windows Mobile® 6.5 operating system in conjunction with the Enterprise Mobility Developer Kits (EMDK) from Motorola.

256 MB RAM and 1 GB flash drive integrated in the device are available for storing user-defined applications and data. For larger applications and volumes of data, BARTEC offers SD memory cards.

1.2 Use

The Enterprise Digital Assistant MC 95xx^{ex}-NI is a hand-guided piece of electric equipment. It serves the mobile capture, processing and wireless transmission of data in hazardous areas.

It is used exclusively in combination with operating devices which satisfy the requirements for overvoltage category I.

The **MC 95xx^{ex}-NI, type B7-A29.-…./…….. series** has been modified for use in the hazardous area of:

- ATEX Zone 2 and Zone 22
- UL Class I Division 2 Groups A, B, C and D
- UL Class II Division 2, Groups F and G
- UL Class III
- Non hazardous area

The **MC 95xx^{ex}-NI** may not be used in locations of:

- ATEX Zone 0
- ATEX Zone 1 and Zone 21
- UL Class I, II Division 1
- UL Class I, II Division 1
- UL Class II Division 2, Groups E

2. Technical Data

2.1 Explosion Protection ATEX Zone 2 and Zone 22

Type	B7-A293-…./……..
Ex protection	⟨Ex⟩ II 3G Ex ic IIC T6 ⟨Ex⟩ II 3D tD A22 IP64 T90°C
Ambient temperature	-20 °C ≤ Ta ≤ +50 °C
Temperature Code	T6
Certification	B1-A293-7C0001

2.2 Explosion Protection UL Division 2

Type	B7-A292-…./……..
Ex protection type	Class I Division 2 Groups A, B, C and D Class II Division 2 Groups F and G Class III
Ambient temperature	-20 °C ≤ Ta ≤ +50 °C
Temperature Code	T6
Certification	UL File E321557

2.3 Characteristics

Dimensions (height x width x depth)	approx. 23.36 cm x 8.89 cm x 5.08 cm approx. 9.2 inch x 3.5 inch x 2.0 inch
Weight including battery	approx. 623 g approx. 22 oz depending on the version and configuration
Display	Transflective 3.7 inch colour TFT-LCD display LED backlight, 65K colors, 640 x 480 pixels
Touchscreen	Glass analog resistive touchscreen
Keyboard variants	Alpha Primary, Alpha Numeric, Calculator Numeric, Telephony Numeric
Audio	VoWWAN, VoWLAN, Team Express compliant, rugged audio connector, high quality speakerphone, headset (wired or Bluetooth) and handset and speaker phone modes
Network connections	High-speed USB client, full-speed USB host, Ethernet (via cradle), Bluetooth
Interfaces	RS232 USB 2..0 Client / USB 1.1 host

2.4 Performance Features

Processor	Marvel PXA320@ processor with 806 MHz
Memory	256 MB RAM / 1GB Flash
Expansion slot	Micro SD slot / supports up to 16 GB
Optional available extension with Micro SD card	1 GB Order no. 17-C1Z0-0007 2 GB Order no. 17-C1Z0-0008
Operating system	Windows Mobile 6.5

2.5 User Environment

Ambient temperature	-20 °C to +50 °C -4 °F to 122 °F
Ambient temperature when charging	0 °C to +40 °C 32 °F to 104 °F
Storage temperature (without battery)	-40 °C to +70 °C -40 °F to 158 °F outside the hazardous area
Air humidity	5% to 95% (non-condensing)
Protection class (EN 60529)	IP 64

2.6 Application Development

EMDK (Operation Mobility Developer kit) is available on the Motorola Developer Central Website.	
– Available for	– C – Java – .Net
More tools are available from Motorola for the devices. e.g.	– Rem Capture for processing registry files. – Application Launcher for dividing applications into categories and access regulation to the individual applications or operating system. – Data Wedge allows data reading by applications that do not support any scanner. – App Center is an end-user application access control engine that restricts activity to a set of authorized applications on mobile devices.

2.7 Voice and Data Transmission Wireless WAN

WWAN radio	
– GSM	GPRS/HSDPA (850, 900, 1800, 1900 and 2100 MHz)
– CDMA	EVDO Rev. A (850 and 1900 MHz) (Verizon or Spirit)
– Antenna	Integrated in the device

2.8 Voice and Data Transmission Wireless LAN

WLAN (integrated radio module)	
Wireless standard	Tri Mode IEEE 802.11a/b/g
Data rate	IEEE802.11a: up to 54 Mbit/sec. IEEE802.11b: up to 11 Mbit/sec. IEEE802.11g: up to 54 Mbit/sec.
Frequency range (country-dependent)	IEEE802.11a: 5 GHz IEEE802.11b: 2.4 GHz IEEE802.11g: 2.4 GHz
Radio channels	Channel 1 – 13 (2412 MHz - 2472 MHz) Channel 14 (2484 MHz) Japan only
Safety	TKIP, AES, WPA (Personal Enterprise), WPA2 (Personal or Enterprise), 802.1x, EAP-TLS, TTLS (CHAP, MS-CHAP, MS-CHAPv2, PAP or MD5), PEAP (TLS, MSCHAPv2,EAP-GTC), LEAP, EAP-Fast (TLS, MS-CHAPv2, EAP-GTC), CCXv4 certified, support for IPv6, FIPS140-2 certified
Spreading procedure	Direct Sequence Spread Spectrum (DSSS) and Orthogonal Frequency Division Multiplexing (OFDM)
Voice communication	Voice-over-IP ready (with P2P, PBX, PTT clients), WI-FiTM certified, IEEE 802.11 a/b/g Direct Sequence Wireless LAN, WI-FI Multimedia (WMM), Motorola Voice Quality manager (VQM)
Antenna	integrated in the device

2.9 Voice and Data Transmission Wireless PAN

Bluetooth	Class 2. Version 2.1 with EDR
Maximum data rate	Up to 2.1 Mbit/s
Antenna	Integrated in the device

2.10 Options for Data Capture

Four possible configurations	– SE950 1D Standard Range Scan Engine – Blockbuster 1D/2D Imager engine – SE950 1D Standard Range Scan Engine and camera – Blockbuster 1D/2D Imager engine and camera

2.10.1 Colour Camera

Resolution	3.0 megapixels
Illumination	User controllable flash
Objective	Autofocus

2.10.2 SE950 1D Standard Range Scan Engine

Reading range	approx. 10 cm to 120 cm approx. 3.9 inch to 47 inch
Resolution	4 mil minimum element width
Roll	± 35° from the vertical
Pitch angle	± 65° from normal
Skew tolerance	± 50° from normal
Ambient light immunity	107,640 lux
Scan rate	104 (± 12) scans/sec. (bi-directional)
Scan angle	47° ± 3° standard 35° ± 3° reduces

2.10.3 SE4500 1D/2D Imager Engine

Reading range	approx. 6 cm to 50 cm approx. 2.3 inch to 19 inch
Resolution	752 x 480 pixels HxV (grey tone)
Roll	360°
Pitch angle	± 60° from normal
Skew tolerance	± 60° from normal
Ambient light	Absolute darkness to 96,900 lux
Aiming element (VLD)	655 Nm ± 10 Nm
Illumination element (LED)	625 Nm ± 5 Nm
Field of view	Horizontal 40° Vertical 25°

2.10.4 Decodable Bar Code Types

Laser Decode Capability MC 95xx[ex]-NI with SE950 1D Standard Range Scan Engine		
1D code		
Code 39	Code 128	Code 93
Codabar	Code 11	Discrete 2 of 5
Interleaved 2 of 5	EAN-8	EAN-13
MSI	UPCA	UPCE
UPC/EAN supplementals	Coupon code	Trioptic 39
Web code	Chinese 2 of 5	GS1 DataBar
GS1 DataBar Truncated	GS1 DataBar Limited	GS1 DataBar Stacked
GS1 DataBar Expanded	GS1 DataBar Expanded Stacked	GS1 DataBar Expanded Stacked Omni
Imaging Decode Capability MC 95xx[ex]-NI with SE4500 1D/2D Imager Engine		
1D Codes		
Code 39	Code 128	Code 93
Codabar	Code 11	Discrete 2 of 5
Interleaved 2 of 5	EAN-8	EAN-13
MSI	UPCA	UPCE
UPC/EAN supplementals	Coupon code	Trioptic 39
Web code	Chinese 2 of 5	GS1 DataBar
GS1 DataBar Truncated	GS1 DataBar Limited	GS1 DataBar Stacked
2D Codes		
TLC39	Composite AB	Composite C
Micro PDF-417	Macro PDF-417	(Macro) Micro PDF-417
QR Code	Data Matrix	microQR
Maxi Code	PDF-417	
US Postnet	US Planet	UK 4-state
Australian 4-state	Canadian 4-state	Japanese 4-state
USPS 4-state (US4CB)	Aztec	

Camera Decode Capability		
1D Codes		
Code 39	Code 128	Code 93
Codabar	Code 11	Discrete 2 of 5
Interleaved 2 of 5	EAN-8	EAN-13
MSI	UPCA	UPCE
UPC/EAN supplementals	Coupon code	Trioptic 39
Web code	Chinese 2 of 5	GS1 DataBar
GS1 DataBar Truncated	GS1 DataBar Limited	GS1 DataBar Stacked
2D Codes		
TLC39	Composite AB	Composite C
Micro PDF-417	Macro PDF-417	(Macro) Micro PDF-417
QR Code	Data Matrix	microQR
Maxi Code	PDF-417	
US Postnet	US Planet	UK 4-state
Australian 4-state	Canadian 4-state	Japanese 4-state
USPS 4-state (US4CB)	Aztec	

2.11 Technical Data Battery

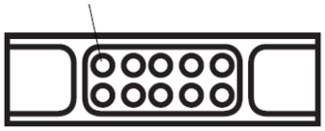
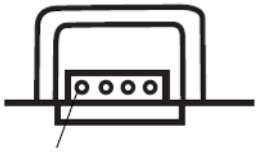
Battery – Type B7-A2Z0-0011	(rechargeable only in the safe area) – Lithium ions 3.7 V/4800 mAh
Operating temperature – during charging – during discharging3 – Storage temperature	 0 °C to +40 °C 32 °F to 104 °F -20 °C to +50 °C -4 °F to 122 °F -20 °C to +50 °C -4 °F to 122 °F
Relative air humidity	20 % - 95 % (non-condensing)
Backup battery	Ni-MH battery (rechargeable) 2.4 V/15 mAh, rechargeable Integrated in the device and replaceable only in the factory.

2.12 Technical Data External Interface

Caution!

Operating of the 10-pin data interface is only permissible outside the hazardous area and only with devices specified by the manufacturer!

Operating of the headset port is only permissible outside the hazardous area and only with devices specified by the manufacturer!

Pin Outs Interface Connector	PIN	Descrpition
Pin 1 	1	Power GND
	2	CRADLE_DETECT
	3	5.4 VDC
	4	Reserved
	5	Ground
	6	USB_ID
	7	Reserved
	8	USB_Vbus
	9	USB_D+
	10	USB_D
Pin Outs Interface Connector	**PIN**	**Descrpition**
 Pin 1	1	Mic_Gnd
	2	Ring
	3	Tip
	4	GND

3. Safety Instructions

3.1 Warnings about the Mobile Computers

Caution!

The device may not be opened by the user outside the hazardous area either! The user may not make any alterations to the device. Do not exchange or replace components and do not retrofit any components on internal plug connectors or slots.

Note

Exception: Micro SD card, SIM card, battery and keypad, screen protector

Caution!

- If components other than those specified are used, the protection against explosions can no longer be assured.
- Substitution of any components may impair suitability for Class I, II, III Division 2 as well as for ATEX Zone 2 and Zone 22.
- To prevent ignition of flammable or combustible atmospheres disconnect power before servicing!
- Do not open or charge the device in the hazardous area!
- Operating of the 10-pin data interface (see chapter 2.12 "Technical Data External Interface") is only permissible outside the hazardous area and only with devices specified by the manufacturer!
- Operating of the headset port is only permissible outside the hazardous area and only with devices specified by the manufacturer!
- Protect the device from impact effects! Do not expose the operating equipment to any caustic/aggressive liquids, vapours or mist! In the event of malfunctioning or damage to the enclosure, take the equipment out of the potentially explosive atmosphere immediately, bring it into a safe area and decommission it by removing the battery!
- If on account of adverse effects or conditions (e.g. penetration of water, fluids, exposure to temperatures outside the specified range etc.) there is a danger of not being able to operate the equipment safely, switch off the equipment instantly and remove the battery.
- Avoid the influence of heat that is higher or lower than the specified temperature range (see chapter 2.5 "User Environment"). Do not place the devices anywhere near sources of heat, such as for example heaters, air exit openings in air-conditioners, or near cookers or other devices (including amplifiers) that radiate heat.
- Avoid the effects of moisture.
- Do not put any objects into the device, into the enclosure or other openings in the Mobile Computer. Openings in the device may not be blocked, obstructed or covered.
- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Attention!

- Equipment that is damaged in any way or that does not function properly must instantly be removed from the hazardous area and sent in for inspection/repair!
- Take the device out of the hazardous areas before wiping it with a dry cloth or cleaning it!
- General statutory regulations or directives on safety at work; accident prevention regulations and environmental protection legislation must be complied with, e.g. Ordinance on industrial health and safety (BetrSichV) or the national ordinances.
- Ensure safe handling of the equipment during operation by making sure the device in a steady position and the user has sufficient space to move!
- When transporting the equipment in vehicles, it must be placed in appropriate compartments or fittings so that it cans neither fall off during the drive nor be exposed to extreme vibrations.
- The rules for hazardous areas (see NEC Article NFPA 70) must be observed. In particular, appropriate clothing and footwear should be worn in view of the risk of dangerous electrostatic charges. Do not wear rubber gloves or suchlike during operation!

3.2 Warnings for Battery

Caution!

- The battery may only be charged and changed outside the hazardous area!
- It must be ensured that only original batteries of the following type/s are used in safety-oriented operation. B7-A2Z0-0011 with 3.7 V/4800 mAh.
- The use of imitation batteries or batteries from other manufacturers will render the type of ignition protection ineffective and there will then be a risk of fire or explosion.
- Keep away from children.
- The battery may explode if disposed of in fire.
- DO NOT short circuit or disassemble battery.
- The battery may only be used for the purposes stated in the user manual and is only suitable for use in the MC 95xx[ex]-NI (type B7-A29.-…./……..).
- If used incorrectly, there is a risk of burning. The battery should not be disassembled over a temperature higher than +50 °C (122 °F). If the battery is damaged, battery acid can escape from the cells and cause corrosion. For that reason, extreme care must be taken in handling and disposing of a damaged or leaking Li-ion battery.
- Defective batteries must be disposed of immediately, whereby the battery disposal regulations that apply to the respective region must be observed.

3.3 Warnings about Laser Devices

Caution!

- Laser-equipped devices from Symbol/Motorola conform to Directive 21CFR1040.10 and 1040.11. (with the exception of the deviations listed in Laser Notice no. 50 of 24 June 2007) as well as EN 60825-1:2007 and IEC 60825-1 (Ed. 2)
- The classification of the laser apparatus is specified on a sign affixed to the device.
- Class 2 laser devices operate with a visible low-voltage light emitting diode. As with any bright source of light, for example the sun, the user should avoid looking directly into the light beam. However, there is no evidence of risks in momentary or brief exposure to a Class 2 laser.
- The use of control elements, adaptations or the application of procedures which do not agree with the instructions described here can lead to a hazardous exposure to radiation.

3.3.1 Laser Devices

Complies with 21CFR1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007 and EN60825-1:2007 and IEC 60825-1 (Ed.2).

The laser classification is marked on one of the labels on the device.

Caution!

Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous laser light exposure.

Class 2 laser scanners use a low power, visible light diode. As with any very bright light source, such as the sun, the user should avoid staring directly into the light beam. Momentary exposure to a Class 2 laser is not known to be harmful.

3.4 Health and Safety Recommendations

Caution!

Use only the accessories, batteries and battery chargers approved by BARTEC. Do not attempt to charge damp/wet MC 95xx^{ex}-NI or batteries. All components must be dry before they are connected to an external power supply.

3.4.1 Ergonomic Recommendations

Caution!

The following recommendations should be observed to avoid or minimise potential health problems at the workplace. Contact your health and safety officer on site to ensure that you are familiar with your company's safety regulations, which serve to protect employees in the workplace.

- Avoid unilateral repetitive movements.
- Posture should be as neutral as possible.
- Avoid using excessive force.
- Keep objects that are used frequently within easy functional reach.
- Perform tasks at heights that suit the person and the type of work
- Place the objects in positions that will eliminate vibrations
- Avoid exerting direct pressure
- Provide adjustable tables and chairs.
- Ensure sufficient clearance for easy movement
- Provide a suitable working environment
- Optimise work procedures
- Alternate hands as often as possible when doing repetitive tasks.

3.4.2 Installation in Vehicles

RF signals can have a negative impact on electronic systems in vehicles (including safety systems) if they have not been installed correctly or shielded adequately. If you have any questions about your vehicle, please get in touch with the manufacturer or with a sales representative. You can find out from the manufacturer if any additional equipment has been installed in the vehicle. An airbag inflates with great force. DO NOT PLACE ANY objects, such as mounted or mobile wireless equipment in the area above the airbag or in the airbag deployment area. If the wireless equipment in the vehicle was not installed properly, serious injuries can occur when the airbag is deployed. Position the device within reach. Make sure you have access to the device without having to take your eyes off the road.

Note

Connection to an alert device that will cause a horn to sound or a light to flash on receipt of an incoming call on public roads is not permissible.

Safety in traffic

Do not make any notes or use the device while driving. Creating a “to do” list or flipping through the address book while driving interferes with safe driving.

In road traffic you must first and foremost concentrate on your own safety and that of the other road users. Give your full attention to the road. Check the legal regulations on the use of wireless devices in road traffic in the respective region. Always observe them. If you use a wireless device while driving, rely on your common sense and adhere to the following:

1. Familiarise yourself with the wireless device and its functions, such as speed dial and redial. These functions may prove to be useful if you wish to make a call without taking your eyes off the road.
2. Use a hands-free telephone, if possible.
3. Inform the person you are speaking with that you are driving. If necessary, end the call if there is heavy traffic or bad weather. Rain, sleet, snow, ice and even heavy traffic can be dangerous.
4. Dial numbers carefully and keep an eye on the traffic. Make your calls when you have stopped the car or before you set off. Plan your calls so that you can make them when parked. If it is essential to make a call when driving, dial only part of the number, check the road again and look in the rear mirror and then dial the rest of the number.
5. Do not engage in stressful and emotional telephone calls which might take your attention away from the road. Let the other person know that you are driving a car and do not get involved in any discussions that might divert your attention from the road.
6. Use your mobile device to call for help if necessary. Dial emergency services (9-1-1 in the USA and 1-1-2 in Europe) or other local emergency service numbers if there is a fire, an accident or a medical emergency. These calls are free of charge on the wireless device! The call can be made independently of security codes or networks and with or without a SIM card.
7. Use your mobile device to call for help for other people in emergency situations. If you witness a serious accident, crime or other emergency, call the emergency service (9-1-1 in the USA and 1-1-2 in Europe) or another local emergency service number. Remember you yourself might need help the next time.
8. Call the breakdown service or a special mobile radio number for support when problems occur on the road. If you drive past a car with a breakdown which does not present any serious risk to traffic, a traffic light that is not functioning, a traffic accident with minor damage and without injured people, or a possibly stolen car, report it to the road patrol or another special mobile radio number for assistance.

“The wireless industry reminds you to use your device/phone safely when driving.”

3.5 Electromagnetic Fields

3.5.1 International

The device complies with internationally recognised standards relating to human exposure to electromagnetic fields from radio devices.

Reducing RF Exposure - Use Properly

Only operate the device in accordance with the supplied instructions.

3.5.2 Portable Devices

This device was tested for typical body-worn operation. Use only BARTEC-tested-and-approved belt clips, holsters, and similar accessories to ensure FCC Compliance. The use of third-party belt-clips, holsters, and similar accessories may not comply with FCC RF exposure compliance requirements, and should be avoided.

Note

The MC 95xx^{ex}-NI must be switched off before it may be carried on the body.

3.5.3 Handheld Devices

To comply with FCC RF exposure requirements, this device must be operated in the hand with a minimum separation distance of 20 cm or more from a person's body. Other operating configurations should be avoided.

3.6 Warnings and Information about Wireless Devices

Note

The use of wireless devices might be forbidden or restricted. This applies above all when you are aboard aeroplanes, in hospitals, near explosives or in other dangerous conditions. If you are not sure which regulations apply to the use of the device, ask for permission before switching it on.

Country-Specific Roaming

This device has the International Roaming Function (IEEE802.11D), which ensures that the device uses the channels allocated to the respective country.

Ad-hoc Operation

Ad-hoc-operation is restricted to channels 36-48 (5150-5250 MHz). The use of this band is limited to indoor use only; outdoor use is not permissible.

FCC requirements to protect against radio-frequency interference

Note: This device was tested and it complies with the limits for a class B digital device according to part 15 of the FCC rules. These limit values were specified to ensure adequate protection from interference when the device is used in a residential area. This device generates and uses radio frequency energy and can radiate it. If the device is not connected and used in accordance with the operating instructions, it can interfere with other radio frequencies. It is not possible to guarantee that there will not be any interference during a particular installation. If the device causes interference with radio or TV reception, which can be established by switching the devices off and on, the interference should be eliminated by one or more of the following measures:

- reorientation or repositioning of the receiving antenna
- increase in the distance between device and receiver
- connection of the device to a socket other than that to which the receiver is connected
- advice from the dealer or a radio/television technician

Radio communication apparatus (Part 15)

This device satisfies the requirements of part 15 of the FCC rules. The operation of the device is subject to the following two conditions:

- the device must not cause harmful interference
- the device must accept all interference it receives, including interference which may cause undesired operation.

Requirements for protection from radio-frequency interference – Canada

This class B digital device complies with the guidelines in the Canadian standard ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Radio Transmitters

This device complies with RSS 210 (Industry & Science Canada). The operation of the device is subject to the following two conditions:

- The device must not cause harmful interference.
- The device must accept all received interference, including interference that may cause undesirable operation.

Label marking: “IC:” in front of the wireless certification indicates compliance with Industry Canada technical specifications.

Radio Transmitters for RLAN Devices

The use of 5 GHz RLAN's, for use in Canada, have the following restrictions:

- Restricted Band 5.60 – 5.65 GHz
- This device complies with RSS 210 of Industry & Science Canada. Operation is subject to the following two conditions:
  (1) this device may not cause harmful interference and
  (2) this device must accept any interference received, including interference that may cause undesired operation.

Label Marking: The Term "IC:" before the radio certification only signifies that industry Canada technical specifications were met.

Country-specific approvals

Test marks are put on the device to indicate that the wireless modules are approved for use in the following countries: USA, Canada and Europe.

You will find detailed information on the test marks for other countries in the EC Declaration of Conformity.

– **Note 1:** For 2.4-GHz products: Europe covers Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Great Britain, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Sweden, Slovakia, Slovenia, Spain and Switzerland.

European Economic Area

The operation of RLAN devices (2.4 GHz) is subject to the following restrictions in the European Economic Area (EEA):

– The 2.4 GHz devices must not exceed a radiating power of 100 mW EIRP in the frequency range between 2.400 and 2.4835 GHz.
– Outdoor usage in France is restricted to between 2.4 and 2.454 GHz.
– In Italy a user licence is required for outdoor use.

The use of Bluetooth® Wireless Technology is subject to the following restrictions in the European Economic Area (EEA):

– The 2.4-GHz devices may not exceed a radiated power of 100 mW EIRP and must adhere to the frequency range between 2.400 and 2.4835 GHz.
– In France devices used outdoors are restricted to 10mW EIRP.
– In Italy a user licence is necessary for use outdoors.

Other countries

Mexico devices must keep to the frequency range between 2.450 and 2.4835 GHz.

Sri Lanka devices must adhere to the frequency range between 2.400 and 2.430 GHz.

3.7 Warnings about the Use of Wireless Devices

Observe all warnings which refer to the use of wireless devices.

3.7.1 Safety in Aircraft

Switch off your wireless device whenever you are asked to do so by airport or airline staff. If your device offers a flight mode or similar function, ask the flight crew about its proper use.

3.7.2 Safety in Hospitals

Wireless devices radiate radio frequencies and can cause interference in electrical medical devices. If you are in a hospital, clinic or public health service, please turn off wireless devices if asked to do so. This is to prevent any interference with sensitive medical equipment.

3.7.3 Cardiac Pacemakers

The manufacturer recommends a minimum distance of 15 cm between a portable handheld wireless device and a Cardiac Pacemaker to avoid potential interference. This guideline is in accordance with independent research results and recommendations from Wireless Technology Research.

- People with implanted pacemakers
- People with implanted cardiac pacemakers should keep the switched-on device at a distance of at least 15 cm away from themselves ALWAYS.
- If you have a pacemaker, do not put the device into your breast pocket.
- The device should be held at the ear furthest away from the cardiac pacemaker.
- If you have reason to suspect interference, SWITCH OFF your device immediately.

3.7.4 Hearing Aids

The wireless device can cause interference with hearing aids. If there is any interference, contact the hearing aid manufacturer to ask about solutions.

- If you wear a hearing aid, do not put this device into your breast pocket.
- The device should be held at the ear furthest away from the cardiac pacemaker.
- If you have reason to suspect interference, SWITCH OFF your device immediately.

3.7.5 Other Medical Instruments

Consult your doctor or the manufacturer of the medical instrument to establish whether putting the wireless product into operation might interfere with the medical instrument.

3.8 Bluetooth

3.8.1 Products with Bluetooth® Wireless Technology

This device is a Bluetooth®-approved product

More information can be found at http://www.bluetooth.org/tpg/listings.cfm

Manufacturer: Motorola --- Product: MC95xx

4. Operation

Before assembling the device, make sure you have all the components and documents.

Scope: 1 x MC 95xx^{ex}-NI
1 x Lithium-ion battery
1 x Strap assembly
1 x Protective overlay on the display window
1 x Stylus
1 x User manual
1 x Special tool for battery release (only for ATEX zone 2 and zone 22)

Caution!

The safety and accident prevention regulations relevant to the respective application must be adhered to. The units must be completely assembled before they may be operated.

4.1 Getting started

Carry out the following steps before first use of the MC 95xx^{ex}-NI:

1. Install a micro SD card (optional).
2. Install the SIM card (only MC 9596^{ex}-NI).
3. Insert the battery.
4. Charge the MC 95xx^{ex}-NI.

4.2 Recommended position for the MC 95xx^{ex}-NI

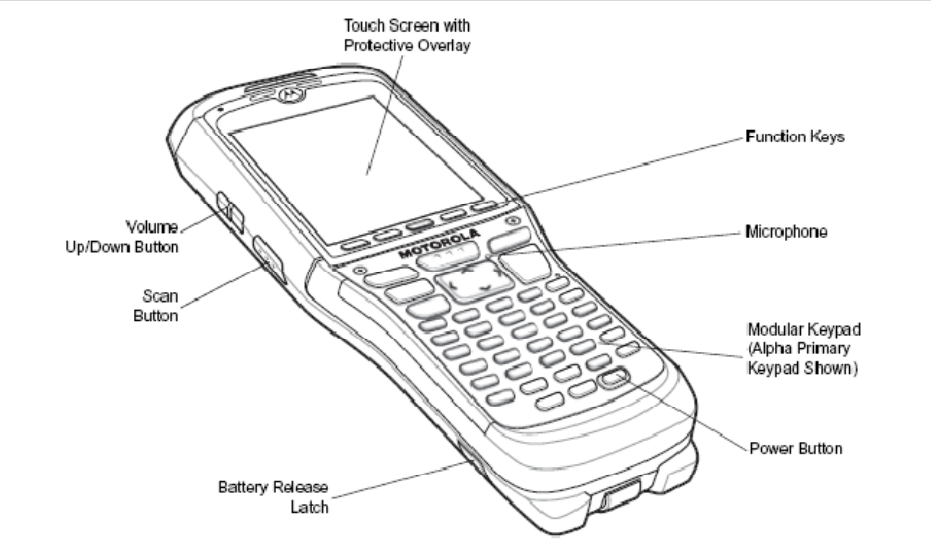
➡ The recommended position for the mobile computer when not in use.

➡ In this position the device cannot be protected against damage.

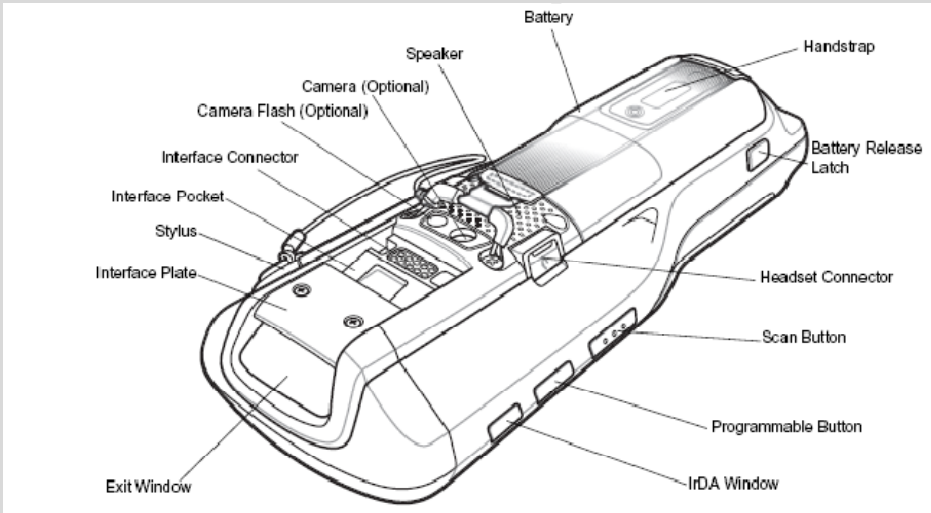
➡ The display can be damaged by objects lying on the supporting surface.

4.3 Parts of the MC 95xx[ex]-NI

Front side



Rear side



4.4 Micro SD Card

Caution!

The micro SD card may only installed and replaced outside of the hazardous area!

Only micro SD cards tested by BARTEC for that purpose may be used in the slot.

The micro SD card slot provides secondary non-volatile storage. The slot is located under the battery pack. Refer to the documentation provided with the card for more information, and follow the manufacturer's recommendations for use.

Caution!

Follow proper ESD precautions to avoid damaging the micro SD card. Proper precautions include, but are not limited to, working on an ESD mat and ensuring that the operator is property grounded.

BARTEC recommend to use following tested micro SD cards:

– 1 GB Order no. 17-C1Z0-0007 or
– 2 GB Order no. 17-C1Z0-0008

4.4.1 Installing a Micro SD Card

To install the micro SD card:

(1) If the MC 95xx^{ex}-NI is in standby mode, press the red **Power** button to activate the device.

(2) Press the red **Power** button to suspend the MC 95xx^{ex}-NI.

(3) Wait for red decode LED to turn on and then turn off.

(4) Unhook the handstrap.

(5) Remove the battery.

(6) Remove the SD card cover using the end of the stylus.

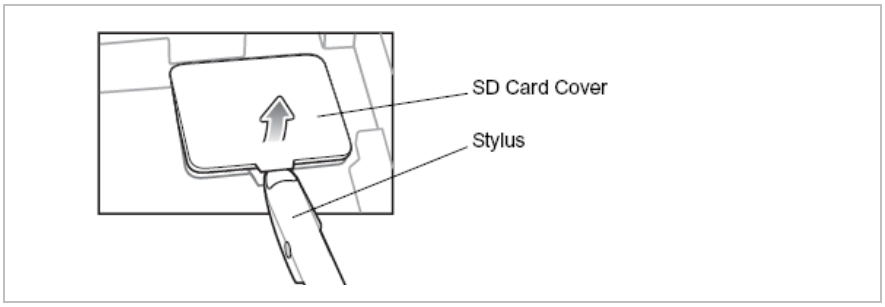


Figure 4-1: SD Card Cover Remove

(7) Slide the micro SD card holder door to the left to unlock.

(8) Lift the micro SD card holder door.

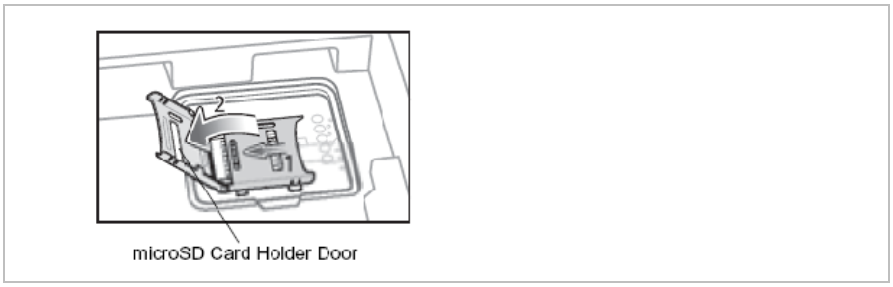


Figure 4-2: Lift micro SD Card Holder door

(9) Place the micro SD card onto the contacts.

Caution!

Follow proper ESD precautions to avoid damaging the micro SD card. Proper precautions include, but are not limited to, working on an ESD mat and ensuring that the operator is property grounded.

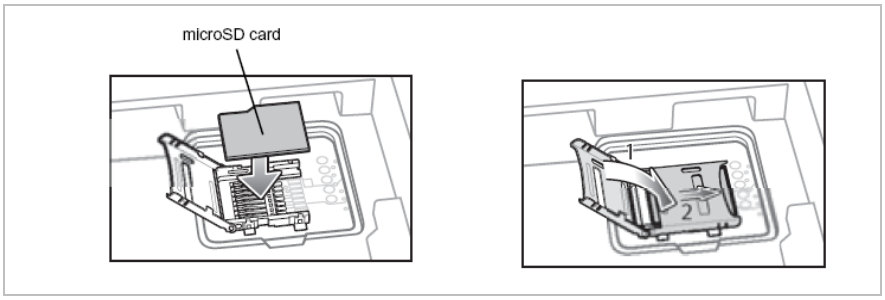


Figure 4-3: Insert micro SD Card Holder in Holder

(10) Close the card holder door and slide to the right to look into place.

(11) Align the SD card cover over the access hole and press down until it snaps into place.

4.4.2 Removing the micro SD card

Caution!

Suspend the MC 95xx^{ex}-NI prior to removing the battery. Failure to properly remove the battery may cause the MC 95xx^{ex}-NI to cold boot and potential loss of data.

This is how you remove a micro SD card:

(1) If the MC 95xx^{ex}-NI is in standby mode, press the red **Power** button to activate the device

(2) Press the red **Power** button to suspend the MC 95xx^{ex}-NI.

(3) Wait for red decode LED to turn on and then turn off.

(4) Unhook the handstrap.

(5) Remove the battery.

(6) Remove the SD card cover using the end of the stylus.

(7) Slide the SD card holder door to the left to unlook.

(8) Lift the micro SD card holder door.

(9) Remove micro SD card from holder.

(10) Close the micro SD card holder door.

(11) Slide the micro SD card holder door to the right to look into place.

(12) Align the SD card cover over the access hole and press down until it snaps into place.

(13) Replace the battery.

4.5 SIM Card

Attention!

The SIM card may only installed and replaced outside of the hazardous area!

GSM phone service requires a SIM card (Subscriber Identification Module) or smart card. Obtain the card from your service provider. The card fits into the MC 9596^{ex}-NI and can contain the following information:

- Mobile phone service provider account details.
- Information regarding service access and references.
- Any additional services to which you have described.

4.5.1 Inserting the SIM card

Note

Only MC 9596^{ex}-NI – configuration
For more information about SIM cards, refer to the service provider's documentation.

To install the SIM card:

(1) If the MC 9596^{ex}-NI is in suspend mode, press the red **Power** button to wake the device.

(2) Press the red Power button to suspend the MC 9596^{ex}-NI.

(3) Wait for red Decode LED to turn on and then turn off.

(4) Unhook the handstrap.

(5) Remove the battery.

(6) Remove SIM card cover using the end of the stylus.

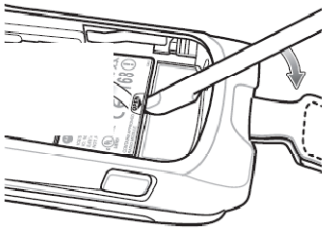


Figure 4-4: SIM Card Cover Removal

(7) Slide the SIM card holder door to the left to unlock.

(8) Lift the SIM card holder door.

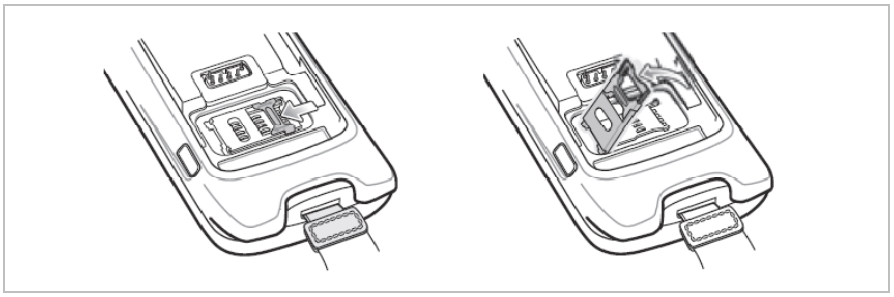


Figure 4-5: Lifting the SIM Cover

(9) Insert the SIM card into the holder door with the contacts facing down and the card notch facing up.

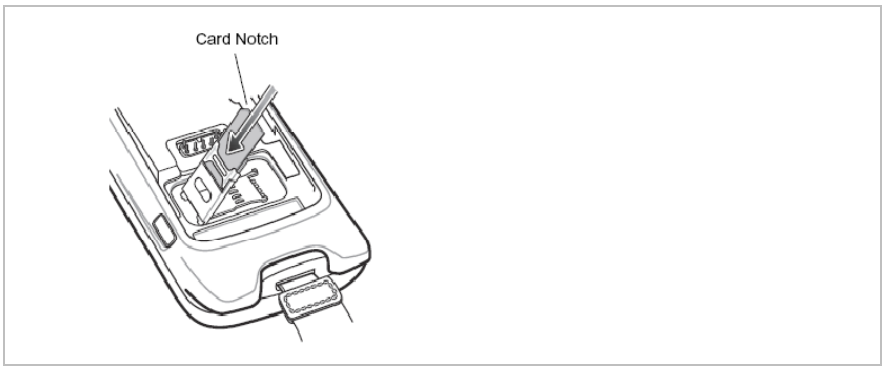


Figure 4-6: Inserting the SIM Card

(10) Close SIM card holder door and slide to the right to lock into place.

(11) Align the SIM card cover over the access hole and press down until it snaps into place.

(12) Insert the battery.

(13) After completing initial MC 9596[ex]-NI setup or after replacing a SIM card:

- Press the red **Power** button.
- On the Today screen tap **Wireless Manager**.
- Ensure Phone is on.
- Press the red **Power** button to suspend the MC 9596[ex]-NI.
- Perform a warm boot.
- Make a call to verify cellular connection.

Note

For detailed information about WWAN activation and settings, refer the Motorola MC9500-K Series Mobile Computer Integrator Guide.

4.5.2 Removing the SIM card

Caution!

Suspend the MC 9596^{ex}-NI prior to removing the battery. Failure to properly remove the battery may cause the MC 9596^{ex}-NI to cold boot and potential loss of data.

To remove an micro SIM card:

(1) If the MC 9596^{ex}-NI is in suspend mode, press the red **Power** button to wake the device.

(2) Press the red Power button to suspend the MC 9596^{ex}-NI.

(3) Wait for red Decode LED to turn on and then turn off.

(4) Unhook the handstrap.

(5) Remove the battery.

(6) Remove the SIM card cover using the end of the stylus.

(7) Slide the SIM card holder door to the left to unlock.

(8) Lift the SIM card holder door.

(9) Remove SIM card from holder.

(10) Close the SIM card holder door.

(11) Slide the SIM card holder door to the right to lock into place.

(12) Align the SIM card cover over the access hole and press down until it snaps into place.

(13) Replace the battery.

4.6 Battery

This chapter provides information on battery functionality, battery status indications, charging the MC 95xx^{ex}-NI charging spare batteries and power saving techniques.

Caution!

The battery may only be charged and changed outside the hazardous area!

It must be ensured that only original batteries of the following type/s are used in safety-oriented operation. B7-A2Z0-0011 with 3.7 V/4800 mAh.

The use of imitation batteries or batteries from other manufacturers will render the type of ignition protection ineffective and there will then be a risk of fire or explosion.

Note

The temperature range for charging the battery is 0 °C to +40 °C. Please note that charging the MC 95xx^{ex}-NI is under intelligent control.

For this purpose, the charging procedure of the MC 95xx^{ex}-NI is activated and deactivated at short time intervals to keep the battery temperature within the permissible range. A LED on the MC 95xx^{ex}-NI indicates when the charging procedure was disabled because of excess temperature.

Use only accessories approved by BARTEC and Motorola to charge the batteries.

4.6.1 How the Battery works

The 4800 mAh battery type B7-A2Z0-0011 provides power to the MC 95xx[ex]-NI and contains charging and status indications on the front of the battery. The indicators function differently depending upon the battery mode and allow the user to determine the health of the battery.

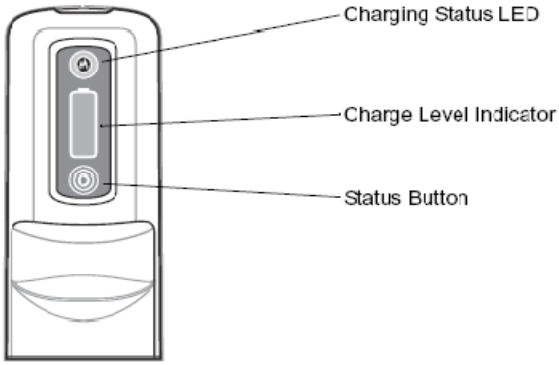


Figure 4-7: Battery

Charging Status LED indicates the charging status and health of the battery. The Charge Level Indicator indicates an unhealthy battery and the charge level of the battery.

4.6.2 Battery Health

A battery becomes unhealthy when the **Battery Usage Indication** reach a predefined threshold (end of usable life).

The **Battery Usage Threshold** value can be changed. See the Motorola MC9500-K Mobile Computer Integrator Guide for more information.

When the battery becomes unhealthy, a dialog box displays on the MC 95xx[ex]-NI. When this appears, tap **Dismiss**. Replace the battery as soon as possible. The battery Charge Level indicator display an “X” when the battery becomes unhealthy (see Figure 4-8). When charging an unhealthy battery in the MC 95xx[ex]-NI, the Battery Status LED blinks red.

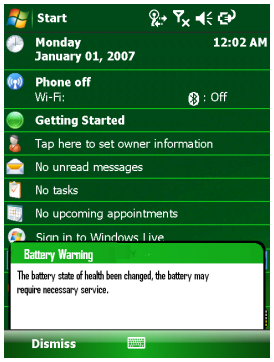


Figure 4-8: Battery Warning Dialogue box

Figure 4-9: Unhealthy Battery Indication

4.6.3 Battery Status

The MC 95xx^{ex}-NI battery provides status information on the front of the battery that allows the user to make determination on what battery to use. The battery status indications vary depending upon the mode of the battery:

- Installed in an MC 95xx^{ex}-NI
- In a charger
- Stand-alone

4.6.4 Installing the Battery

Attention!

The battery may only be charged and changed outside the hazardous area!

It must be ensured that only original batteries of the following type/s are used in safety-oriented operation. B7-A2Z0-0011 with 3.7 V/4800 mAh

The use of imitation batteries or batteries from other manufacturers will render the type of ignition protection ineffective and there will then be a risk of fire or explosion.

To install the battery:

(1) Insert the battery, top first, into the battery compartment.

(2) Press the battery down into the battery compartment until the battery release latches snap into place.

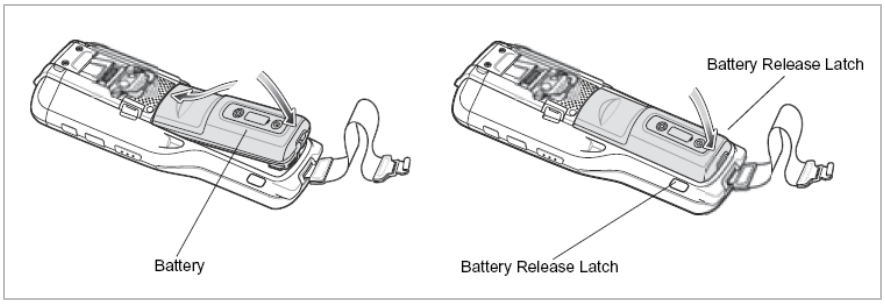


Figure 4-10: Inserting the Battery

(3) The MC 95xx^{ex}-NI powers up automatically after inserting the battery. If the battery has been changed previously.

4.6.5 Replacing a battery

Caution!

The battery may only be charged and changed outside the hazardous area!

It must be ensured that only original batteries of the following type/s are used in safety-oriented operation. B7-A2Z0-0011 with 3.7 V/4800 mAh

The use of imitation batteries or batteries from other manufacturers will render the type of ignition protection ineffective and there will then be a risk of fire or explosion.

Attention!

Suspend the MC 95xx^{ex}-NI prior to removing the battery. Failure to properly remove the battery may cause the MC 95xx^{ex}-NI to cold boot and potential loss of data.

To replace the battery:

Only for MC95xx^{ex}-NI, type B7-A292-…./…….. UL Class I, II, III Division 2

(1) If the MC 95xx^{ex}-NI is in suspend mode, press the red **Power** button to wake the device.

(2) Press the red **Power** button to suspend the MC 95xx^{ex}-NI.

(3) Wait for red Decode LED to turn on and then turn off.

(4) Unhook the handstrap.

(5) Press the two battery release latches to release the battery. The battery ejects slightly.

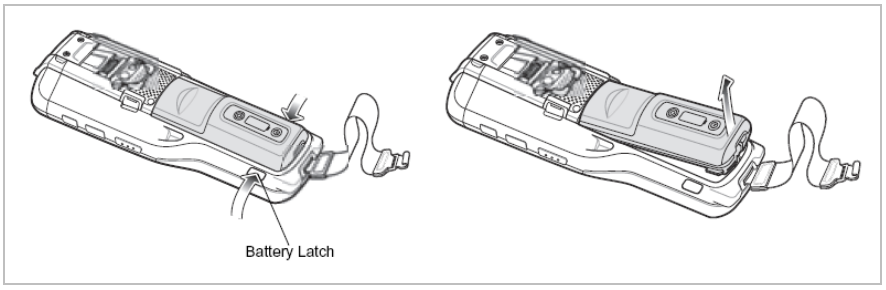


Figure 4-11: Removing the battery (UL Class I, II, III Division 2)

(6) Lift the battery from the MC 95xx^{ex}-NI.

(7) Insert the replacement battery, top first, into the battery compartment in the back of the MC 95xx^{ex}-NI.

(8) Press the battery down until the battery release latches snap into place.
The MC 95xx^{ex}-NI powers up after inserting the battery.

Only for MC95xx^{ex}-NI, type B7-A293-…./…….. ATEX Zone 2 and Zone 22

(1) If the MC 95xx^{ex}-NI is in suspend mode, press the red **Power** button to wake the device.

(2) Press the red **Power** button to suspend the MC 95xx^{ex}-NI.

(3) Wait for red Decode LED to turn on and then turn off.

(4) Unhook the handstrap.

(5) Put the special tool inside of the two holes to release the battery latches to release the battery. The battery ejects slightly.

Special tool for the battery latch release

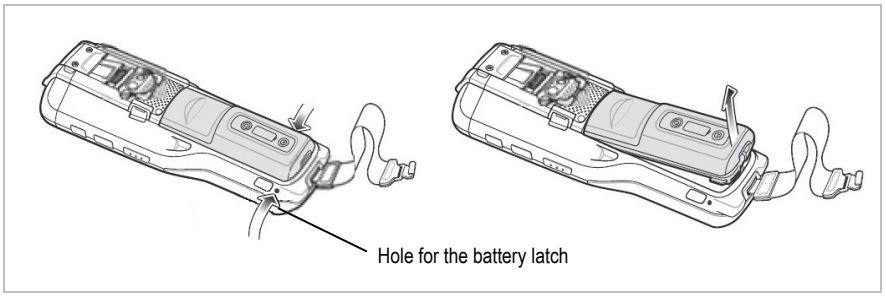


Figure 4-12: Removing the Battery (ATEX Zone 2 and Zone 22)

(6) Lift the battery from the MC 95xx^{ex}-NI.

(7) Insert the replacement battery, top first, into the battery compartment in the back of the MC 95xx^{ex}-NI.

(8) Press the battery down until the battery release latches snap into place.
The MC 95xx^{ex}-NI powers up after inserting the battery.

4.6.6 Powering On the MC 95xx^{ex}-NI

After the MC 95xx^{ex}-NI is connected to power the splash screen displays for about a minute as the MC 95xx^{ex}-NI initializes its flash file system, then the calibration window appears.

Note

The Calibration screen can be accessed by pressing **CTRL** key - **BKSP** key or tapping **Start** > **Settings** > **Screen** > **Align Screen** button.

Calibrating the Screen

To calibrate the screen so the cursor on the touch screen aligns with the tip of the stylus:

(1) Remove the stylus from its holder on the side of the MC 95xx^{ex}-NI.

(2) Carefully press and briefly hold the tip of stylus on the center of each target that appears on the screen.

(3) Repeat as the target moves around the screen, then tap the screen to continue.

4.6.7 Charging the battery

Attention!

The battery may only be charged and changed outside the hazardous area!

Note

The temperature range for charging the battery is 0 °C to +40 °C. Please note that charging the MC 95xx^{ex}-NI is under intelligent control.

For this purpose, the charging procedure of the MC 95xx^{ex}-NI is activated and deactivated at short time intervals to keep the battery temperature within the permissible range. A LED on the MC 95xx^{ex}-NI indicates when the charging procedure was disabled because of excess temperature.

Use only accessories approved by BARTEC and Motorola to charge the batteries.

Before using the MC 95xx^{ex}-NI for the first time, charge the battery using either a charging cable or a cradle:

– USB Charging cable
– Charging Cable (only charging)
– Single USB Charging Station
– 4-Slot Charging Station (only charging)
– 4-Slot Ethernet Charging Station

Align and hook the MC 95xx^{ex}-NI interface pocket onto the cradle's or cable's cleat. The battery automatically begins charging. See Table 4-1 for charging indications.
The 4800 mAh battery, type B7-A2Z0-0011 fully charges in less than six hours.

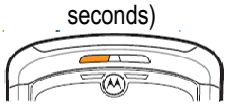
State	Healthy Battery LED Status	Unhealthy Battery LED Status
None – battery is not charging – MC 95xx^{ex}-NI is not connected correctly to the cradle/cable or not connected to a power source. – cradle/cable is not powered.	Off 	Off 
Charging	Slow Blinking Amber (1 blink every 2 seconds) 	Slow Blinking Red (1 blink every 2 seconds) 
Fully charged	Solid Green 	Solid Red 
Indicates a charging error, e.g.: – temperature is too low or too high. – charging has gone on too long without completion (typically eight hours).	Fast Blinking Amber (2 blinks/second) 	Fast Blinking Amber (2 blinks/second) 

Table 4-1: Charging Battery Status LED indications

The MC 95xx^{ex}-NI is equipped with a battery backup module, which is charged automatically when the main battery is fully charged. When the MC 95xx^{ex}-NI is taken into operation for the first time, the battery backup module needs about 36 hours to be fully charged. This is also the case when the main battery was removed for several hours, which discharges the backup module. The battery backup module ensures that the data in the working memory are retained for at least 15 minutes after the main battery of the MC 95xx^{ex}-NI was removed. When the MC 95xx^{ex}-NI reaches a low charging state, the data in the working memory are retained for at least 36 hours due to the combination of main battery and battery backup module. Use a charging station or charging cable to charge the battery. You can find information on how to set up cables and charging stations, as well as about the charging procedure in the Motorola documentation MC9500-K User manual for integration of mobile computers.

4.6.8 Installed in an MC 95xx^{ex}-NI

When the 4800 mAh battery, type B7-A2Z0-0011 is installed in the MC 95xx^{ex}-NI, the user can view the charge level (with Status button press) and health of the battery (see Figure 4-13). The Battery Status LED is disabled when the battery is installed in the MC 95xx^{ex}-NI. If the battery is unhealthy, the Charge Level indicator displays an “X” (see Figure 4-13).

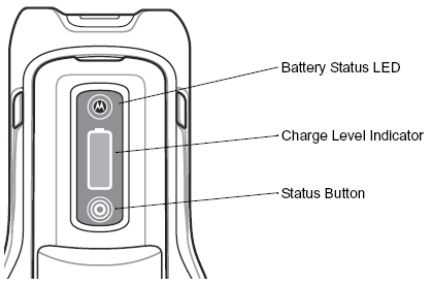


Figure 4-13: Battery in MC 95xx^{ex}-NI

Press the Status button to display the current battery charge level. It will display for five seconds and then turn off. Table: 4-2: Charge Level Indicator list the Charge Level Indications when the Status button is pressed.

	Charge Level Indicator	Description
		Indicates that the remaining charge is approximately between 0% and 20%.
		Indicates that the remaining charge is approximately between 21% and 40%.
		Indicates that the remaining charge is approximately between 41% and 60%.
		Indicates that the remaining charge is approximately between 61% and 80%.
		Indicates that the remaining charge is approximately between 81% and 100%.

Table: 4-2: Charge Level Indicator

Note

The battery front panel is not visible when the MC9500-K is charging in a cradle. The battery front panel is visible when charging with a charging cable. The Charge Level indicator displays a “charging in mobile computer” indication (see Table 4-3).

Action	State	Healthy Battery		Unhealthy Battery	
		Battery Status LED	Charge Level Indicator	Battery Status LED	Charge Level Indicator
None	Not Charging	Off		Off	
Button Press	Not Charging	Off		Off	
None	Charging in cradle or cable	Off		Off	
Button Press	Charging in cradle or cable	Off		Off	

Table 4-3: Battery in MC 95xx[ex]-NI

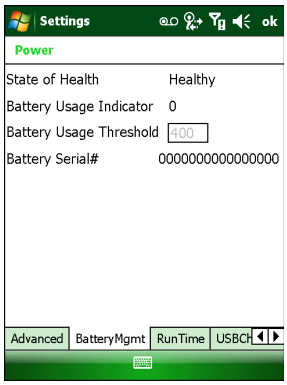


Figure 4-14: Power – BatteryMgmt Window

The health of the battery can also be viewed on the MC 95xx[ex]-NI Power applet.

Tap ***Start*** > ***Settings*** > ***Power*** *icon* > ***BatteryMgmt*** *tab.*

Item	Description
State of Health	Indicates the current battery state (Healthy or Unhealthy).
Battery Usage Indicator	Indicates the usage of the battery.
Battery Usage Threshold	Indicates the usage indicator threshold.
Battery Serial Number	Displays the serial number of the battery.

Table 4-4: The "BatteryMgmt" window.

For information on changing the Battery Usage Threshold, refer to the *MC9500-K Mobile Computer Integrator Guide*.

4.6.9 In a charging station

Caution!

The battery may only be charged and changed outside the hazardous area!

When the battery is in a Single Slot Battery Charger, Four Slot Battery Charger or Vehicle Battery Charger, the battery charging status and health is indicated on the front of the battery. If the charger is not powered, the battery acts as if it is in stand-alone mode. See chapter 4.6.10 Stand-alone for more information.

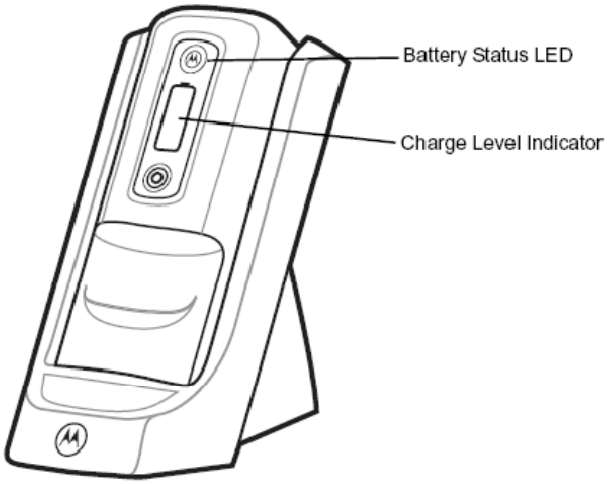


Figure 4-15: Battery in Single Slot Battery Charger

The Battery Status LED displays the current state of charging as described in Table 4-5: "Battery Status in charger" "Table 4-5. The Charge Level indicator displays the charge level of a healthy battery as described in Table: 4-2.

With an unhealthy battery, an "X" appears on the display. To view the charge level, press the Status button. The display indicates the level of charge. After five seconds the display reverts to the "X" indication.

State	Healthy Battery		Unhealthy Battery	
	Battery Status LED	Charge Level Indicator	Battery Status LED	Charge Level Indicator
None (charger not powered)	Off		Off	
Charging	Slow Blinking Amber (1 blink every 2 seconds)		Slow Blinking Red (1 blink every 2 seconds)	
Fully Charged	Solid Green		Solid Red	
Charging Error *	Fast Blinking Amber (2 blinks/second)		Fast Blinking Amber (2 blinks/second)	
* temperature is too low or too high. * charging has gone on too long without completion (typically eight hours).				

Table 4-5: "Battery Status in charger" "

4.6.10 Stand-alone

When the battery is not installed in an MC 95xx[ex]-NI or a charger, the charge status and health of the battery displays on the battery front panel. If the battery is unhealthy, an “X” appears in the Charge Level indicator. Press the Status button to view the health and charge level of the battery. The Battery Status LED lights and the Charge Level indicator display the charge level. After five seconds the LED turns off and the Charge Level indicator reverts to the previous display. See Table for Battery Status LED and Charge Level indicator descriptions.

Status	Healthy Battery		Unhealthy Battery	
	Charging state LED	Charging state display	Charging state LED	Charging state display
No action	Off		Off	
Keystroke	Steady green light		Steady red light	

Table 4-6 "Battery Status – Stand alone"

4.7 Keypad

4.7.1 Replacing Keypad

The MC 95xx^{ex}-NI has interchangeable modular keypads.

Caution!

- The keypad may only be changed outside the hazardous area!
- It must be ensured that only original keypads are used in safety-oriented operation.
- The use of imitation keypads from other manufacturers will render the type of ignition protection ineffective and there will then be a risk of fire or explosion.

Attention!

- Power off the MC 95xx^{ex}-NI before start of change parts.
- Put the MC 95xx^{ex}-NI into suspend mode before you remove the battery. Failure to properly remove the battery may cause the MC 95xx^{ex}-NI to cold boot and potential loss of data.

If the MC 95xx^{ex}-NI is in suspend mode, press the Power button to wake the device. Wait for the MC 95xx^{ex}-NI to fully awake from suspend mode.

(1) Press the Power button to suspend the MC 95xxex-NI.

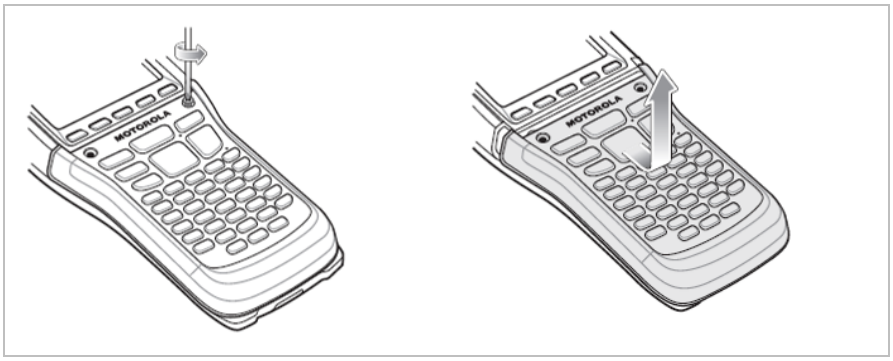
(2) Wait for red Decode LED to turn on and then turn off.

(3) Unhook the handstrap.

(4) Remove the battery.

(5) Remove and discard two screws securing the keypad to the housing.

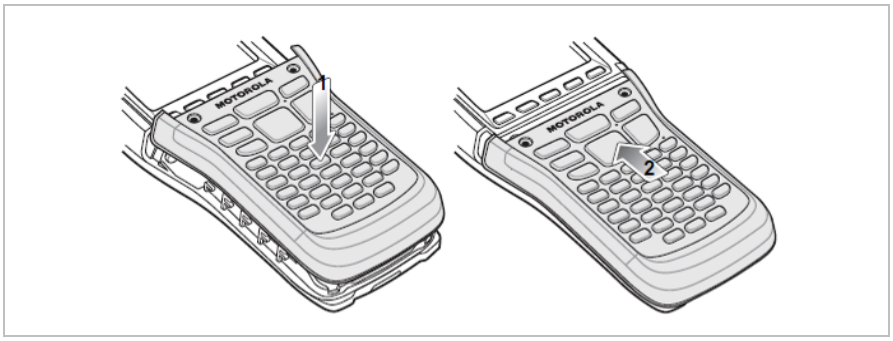
(6) Slide the keypad down toward the bottom of the device and then lift.



Remove screws *Remove keypad*

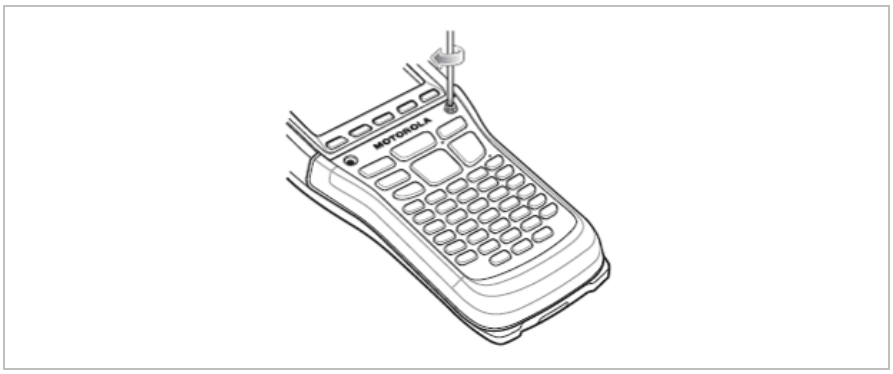
(7) Align the new keypad with the housing.

(8) Press the keypad down and then slide the keypad up.



Remove Keypad

(9) Secure the keypad with two new screws provided with the keypad. Torque the screws to 0.25 Nm (0.18 ft-lbs.)



(10) Replace the battery.

(11) Press the power button for five seconds to perform a warm boot.

4.8 Screen Protector

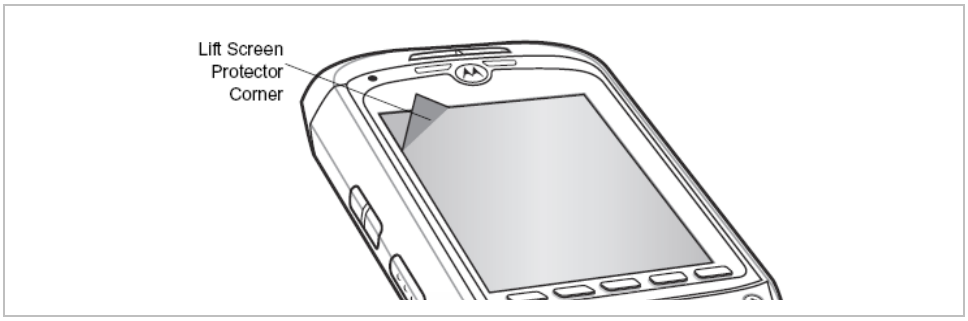
Caution!

- The screen protector may only be changed outside the hazardous area!
- It must be ensured that only original screen protector used in safety-oriented operation.
- Use only BARTEC type B7-A2Z0-0017
- The use of imitation screen protectors from other manufacturers will render the type of ignition protection ineffective and there will then be a risk of fire or explosion.

4.8.1 Removing the Screen Protector

The MC 95xx^{ex}-NI is provided with a screen protector. BARTEC recommends using this to minimize wear and tear. Screen protectors enhance the usability and durability of touch screen displays.

To remove the screen protector, lift the corner using a thin plastic card, such as a credit card, then carefully lift it off the display.



Attention!

Do not use any sharp object to remove the screen protector. This could damage the display.

Note

Use without the screen protector impairs, amongst other things, the equipment warranty. You can get a replacement screen protector from your customer consultant or from BARTEC. Installation instructions for the screen protector are part of the delivery scope. Part number: B7-A2Z0-0017 screen protector, pack of 5.

4.9 Connection to the PC

The MC 95xx^{ex}-NI series is delivered with a Microsoft WM 6.5 operating system or follow-up version. Microsoft supplies software free of charge to establish a connection to a PC for synchronisation, installation and data exchange.

4.9.1 Active Sync

Note

To be able to communicate with various host partners, it is recommendable to install Microsoft ActiveSync (version 4.5 or higher) on the host computer. ActiveSync synchronises the information on the mobile computer with information on the host computer. Changes made on the mobile computer or host computer remain in both partners after synchronisation.

The ActiveSync Microsoft program is used for synchronising or installing software/data. ActiveSync is available for downloading as freeware at www.microsoft.com

Supported Operating Systems:

– Windows XP

For system requirements see the Microsoft homepage under Active Sync version 4.5 or higher.

Further information on ActiveSync can be found in the Motorola integrator Guide or on the Microsoft homepage.

4.9.2 DEVICE Center or mobile device center

Note

To be able to communicate with various host partners installed on Windows Vista or Windows 7, it is recommendable to install the Microsoft Device Center on the host computer. Device Center synchronises the information on the mobile computer with information on the host computer. Changes made on the mobile computer or host computer remain on both partners after synchronisation.

The Microsoft Mobile Device Center program is used for synchronising or installing software/data. Mobile Device Center is available for downloading as freeware at www.microsoft.com

Supported Operating Systems:

– Windows Vista or Windows 7

For system requirements see Device Center on the Microsoft homepage

Further information on Device Center can be found in the Motorola integrator Guide or on the Microsoft homepage.

5. Commissioning

The operator of an electrical system in a hazardous environment must keep the operating equipment in an orderly condition, operate it correctly, monitor it and do the required maintenance and repairs.

Before commissioning the MC95xx^{ex}-NI, check that all components and documents are there.

The following conditions must be met before the device may be commissioned:

- Check the MC95xx^{ex}-NI for damage to display, scanner window and the enclosure.
- Check that the used battery is a certified one.
- Make sure that the battery is changed and insert in the MC95xx^{ex}-NI.
- Close the battery.
- Check when use a screen protector that it is a certificated one.

6. Software Versions

This user manual various software configurations and references are made to operating system or software versions for:

- Adaptation Kit Update (AKU) version
- OEM version
- BTExplorer version
- Fusion version
- Phone version

Note

The software is not relevant for the equipment explosion protection. You can find information about this in the Motorola documentation.

Motorola Homepage: http://www.motorola.com/web/Business/CT/Enterprise+Mobility.html

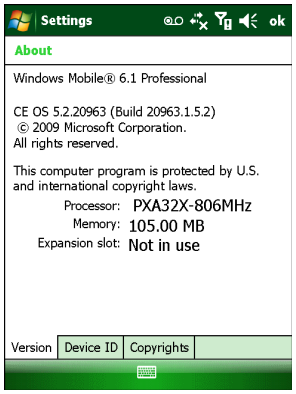
Support - Product Manuals - Mobile Computers - MC9500-K

6.1 AKU Version

To determine the Adaptation Kit Update (AKU) version:

Tap **Start** > **Settings** > **System** tab > **About** icon > **Version** tab.

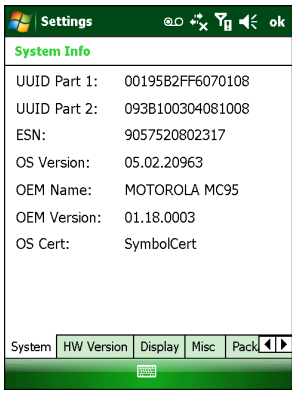
The second line lists the operating system version and the build number. The last part of the build number represents the AKU number. For example, *Build 20963.1.5.2* indicates that the device is running AKU version 1.5.2



6.2 OEM Version

To determine the OEM software version:

Tap **Start** > **Settings** > **System** tab > **System Info** icon > **System** tab.



6.3 BTExplorer Version

Note

BTExplorer application is only available when the StoneStreet One Bluetooth stack is enabled. Refer to the MC9500-K Mobile Computer Integrator Guide for information on selecting the Bluetooth stack.

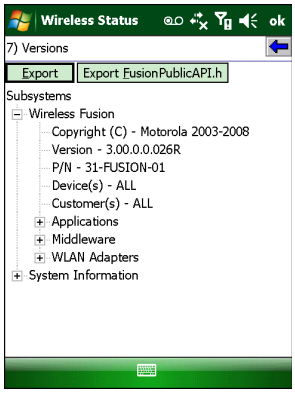
To determine the BTExplorer software version:

Tap **BTExplorer** icon > **Show BTExplorer** > **File** > **About**.

6.4 Fusion Version

To determine the Fusion software version:

Tap **Fusion Signal Strength** icon > **Wireless Status** > **Versions**.

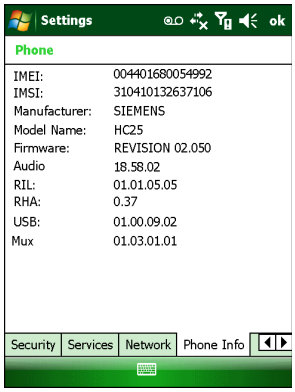


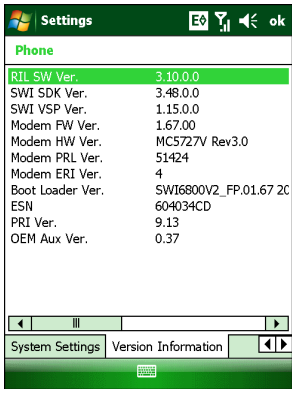
6.5 Phone Software

To determine the Phone software version:

On MC 9596[ex]-NI, tap **Start** > **Phone** > **Menu** > **Options** > PhoneInfo tab.

On MC 9598[ex]-NI, tap **Start** > **Phone** > **Menu** > **Options** > **Version information** tab.





7. Trouble shooting

Caution!

If you have any problems with the MC 95xx^{ex}-NI, bring the device into a safe area first before you try to remedy the fault.

Notes on Troubleshooting can be found in the user manual or Integrator Guide from Motorola http://www.motorola.com/web/Business/CT/Enterprise+Mobility.htm on the Motorola homepage.

The Motorola page for the MC95xx manuals for the non-explosion-proof version

- Support
- Product Manuals
- Mobile Computers
- MC95xx
- Click on “More” for a complete list.

If you have problems with your device, please contact the BARTEC sales company or commercial representation responsible for your region. You can find contact information under:

http://www.bartec.de/homepage/eng/10_unternehmen/10_unternehmen/s_10_10_50.asp?C=1

7.1 Energy Saving Options

Observe the following battery saving tips:

- Leave the MC 95xx^{ex}-NI connected to AC power at all times when not in use.
- Set the MC 95xx^{ex}-NI to turn off after a short period of non-use.
- Set the backlight to turn off after a short period of non-use.
- Turn off all wireless activities when not in use.

7.1.1 Changing the Power Settings

To set the MC 95xx^{ex}-NI to turn off after a short period of non-use:

1. Tap **Start** > **Settings** > **System** tab > **Power** icon > **Advanced** tab.
2. Select the **On battery power**: **Turn off device if not used for** check box and select a value from the drop-down list.
3. Select **ok**.

7.1.2 Changing the Backlight Settings

To change the backlight settings in order to conserve more battery power:

1. Tap **Start** > **Settings** > **System** tab > **Backlight** icon > **Battery Power** tab.
2. Select the **Disable backlight if device is not used for** check box and select a value from the drop-down list.
3. Select the **Brightness** tab.
4. Tap the **Disable backlight** check box to turn off the display backlight, or use the slider to set a low value for the backlight.
5. Select **ok**.

7.1.3 Changing the Keypad Backlight Settings

To change the keypad backlight settings in order to conserve more battery power:

1. Tap **Start** > **Settings** > **System** tab > **Keylight** icon > **Battery Power** tab.
2. Select the **On battery power**: **Disable keylight if device if not used for** check box and select a value from the drop-down list.
3. Select the **Advanced** tab.
4. Tap the **Disable keylight** check box to turn off the keypad backlight.
5. Select **ok**.

7.1.4 Changing the settings for the display backlight

This is how you change the settings for the display backlight to save battery power:

1. Tap on **Start** > **Settings** > Tab **System** > Symbol **Backlight** > Tab **Battery Power**.
2. Activate the control box **Disable backlight if device is not used for**, and select a value from the Dropdown List.
3. Select the Tab **Brightness**.
4. Tap on the control box **Disable backlight**, to switch off the display backlight, or use the slider to set a lower value for the display backlight.
5. Tap on **OK**.

7.1.5 Turning Off the Radios

Windows Mobile 6 devices include **Wireless Manager**, which provides a simple method of enabling, disabling, and configuring all the device's wireless capabilities in one place.

To open **Wireless Manager**, tap the **Connectivity** icon or tap **Wireless Manager** on the **Today** screen.

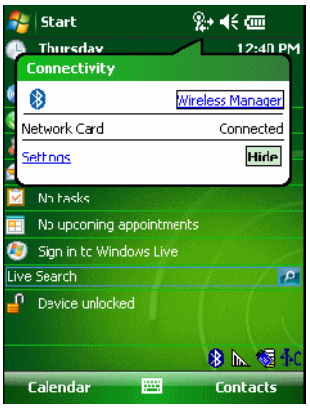


Figure 7-1: Opening Wireless Manager

Figure 7-2: Wireless Manager Windows

Note

Wireless connection options vary depending upon configurations.

1. To enable or disable a wireless connection, tap the specific button.
2. To enable or disable all wireless connections, tap and hold the **All** button.
3. To configure settings for a connection, tap **Menu**.

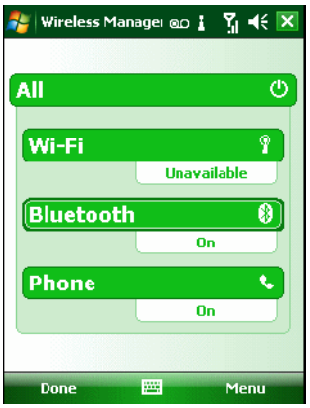


Figure 7-3: Wireless Manager Menu

7.2 Resetting the MC 95xx^{ex}-NI

There are two resetting functions: Warm boot and cold boot. In the case of a warm boot the MC 95xx^{ex}-NI is restarted by closing all executed programs. In the case of a cold boot, the MC 95xx^{ex}-NI is also restarted and, in addition, some drivers initialised. Data stored in a flash memory or on a memory card are not lost.

Carry out a warm boot first if the MC 95xx^{ex}-NI does not function properly. If the MC 95xx^{ex}-NI still doesn't respond, carry out a cold boot.

7.2.1 Warm boot

Executing a warm boot

Press the red power switch (**Power**) for about five seconds. Release the power switch (**Power**) as soon as the MC 95xx^{ex}-NI begins with the start procedure.

7.2.2 Cold boot

Executing a cold boot

To execute a cold boot keep the keys 1 and 9, as well as the red power switch (**Power**) pressed simultaneously.

7.2.3 Clean Boot

Caution!

A clean boot should only be performed by an authorized system administrator. You must connect the MC 95xx^{ex}-NI to AC power during a clean boot. Removing AC power from the MC 95xx^{ex}-NI during a clean boot may render the MC 95xx^{ex}-NI inoperable.

A clean boot resets the MC 95xx^{ex}-NI to the factory default settings. All data in the Application folder is retained. You must download the Clean Boot Package file from the Support Central web site by Motorola

- Support – software Download – Mobile Computer – MC95xx
- Click on "More for complete list"

and install on the MC 95xx^{ex}-NI.

To perform a clean boot:

1. Download the Clean Boot Package from the Support Central web site. Follow the instructions included in the package for installing the package onto the MC 95xx^{ex}-NI.
2. Simultaneously press the Power button and the 1 and 9 keys.
3. Immediately, as soon as the device starts to boot and before the splash screen is visible, press and hold the left scan button.
4. Insert the MC 95xx^{ex}-NI into a powered cradle or cable.
5. The MC 95xx^{ex}-NI updates and then re-boots.
6. After successful clean boot, the calibration screen appears.

8. Maintenance, Inspection, Repair

This chapter describes cleaning and storing the MC 95xx^{ex}-NI, as well as possible procedures when problems occur while using the MC 95xx^{ex}-NI.

Caution!

When doing maintenance or servicing or when checking associated equipment, comply with the applicable regulations in accordance with directives IEC 60079-19 and IEC 60079-17!

Installation/dismantling, operating and maintenance work may be carried out by trained specialists only. Statutory regulations and other binding directives on workplace safety, accident prevention and environmental protection must be adhered to.

You should heed the following tips when using the MC 95xx^{ex}-NI to guarantee fault-free operation:

- Pay attention that the MC 95xx^{ex}-NI display is not scratched. When working with the MC 95xx^{ex}-NI use the supplied input pen or pens with plastic tip which are designed for use with touch screens. Never use a ballpoint pen, pencils or other pointed items on the MC 95xx^{ex}-NI screen. BARTEC recommends using a screen protector, Part no. B7-A2Z0-0017.
- The MC 95xx^{ex}-NI touch screen is made of polycarbonate. Please make sure that the MC 95xx^{ex}-NI is not dropped or subjected to hard knocks.
- Protect the MC 95xx^{ex}-NI against extreme temperatures. Do not leave it on the dashboard of the car on hot days and keep it away from heat sources.
- Do not store the MC 95xx^{ex}-NI in dusty, moist or wet environments.
- Use a soft spectacle cleaning cloth to clean the MC 95xx^{ex}-NI. If the MC 95xx^{ex}-NI display surface is dirty, clean it with a soft spectacle cleaning cloth soaked in diluted window cleaner.
- Change the re-chargeable battery regularly to ensure maximum battery life and equipment performance. Battery life depends on the individual usage pattern. The battery provides a state display to estimate the remaining life. You can find further information in chapter 4.6 "Battery".
- Pay attention that the scan window is not scratched. Clean the window regularly. Dust, contaminants and scratches on the scan window can lead to visible spots on the pictures taken with the scanner.
- The battery should be completely charged before it is used for the first time. Note that the maximum capacity of the battery is not attained until after approx. 5-6 charging and discharging cycles.

- The MC 95xx^{ex}-NI is equipped with a screen protector. BARTEC recommends using this, to avoid wear marks. A screen protector contributes to the user friendliness of the equipment and protects the touch screen. The advantages at a glance:
  - Protection against scratches and dents
  - Resistant and non-slip writing and touch screen surface
  - Protection against abrasion and chemicals
  - Reflection reduction
  - Equipment screen always looks brand new
  - Simple and quick installation
- As the battery power diminishes over the course of time, the batteries should be completely discharged and recharged every now and then in order to retain the full capacity. For that purpose the devices are left switched on until the devices switch off themselves. Then recharge the battery completely outside the Ex area.
- Before a lengthy idle time it is essential to charge the battery completely and to recharge it regularly (every 3 months).

8.1 Servicing

Caution!

In accordance with IEC 60079-19 and IEC 60079-17, the owner-operator of the electrical installations in potentially explosive areas has an obligation to have these installations checked by a qualified electrician to ensure that they are in a proper condition.

8.2 Inspection

Caution!

Repairs on explosion-protected operating equipment may be done only by authorised persons using original spare parts and working in accordance with the latest developments of technology. The relevant applicable regulations must be observed. Please direct any questions you may have to BARTEC GmbH.

8.3 Cleaning

Caution!

If you wish to clean the MC 95xx^{ex}-NI or components, take the device out of the Ex area first before you start any cleaning measures.

8.3.1 Required materials

- Alcohol cleaning wipes
- Lens cleaning wipes
- Cleaning cotton buds
- Isopropyl
- Compressed air spray with hose.

8.3.2 Housing

Wipe the housing including the keys and the spaces between the keys with the alcohol cleaning wipes.

8.3.3 Display

The display can be cleaned with the alcohol cleaning wipes, however, attention must be paid that liquid does not collect around the edges of the display. The display must then be dried immediately with a soft, fluff-free cloth to avoid streaks.

8.3.4 Scan window

Clean the scan window regularly with a lens cleaning wipe or another suitable cleaning agent for optical equipment such as, for example, spectacles.

8.3.5 Interface connection

(1) Remove the battery from the MC 95xx^{ex}-NI. See chapter 4.6.5 "Replacing a battery".

(2) Dip the end of a cotton bud in Isopropyl.

(3) Rub over the interface connection on the rear of the MC 95xx^{ex}-NI several times with the tip of the cotton bud. Pay attention that no cotton residue remains on the plug connector.

(4) Repeat this procedure at least three times.

(5) Remove all grease and dirt deposits in the plug connector area with the help of the alcohol-soaked cleaning cotton bud.

(6) Then use a dry cotton bud and repeat steps 3 to 5.

(7) Spray compressed air onto the plug-connector area and keep the hose, resp. the nozzle about 15 mm above the surface.

Attention!

Do not direct the nozzle onto yourself or other persons. Pay attention that the nozzle does not point towards your face.

(8) Check the area for grease and dirt residue and repeat the cleaning procedure if necessary.

(9) Change the battery.

8.3.6 Battery contacts

(1) Remove the battery from the MC 95xx^{ex}-NI. See chapter 4.6.5 "Replacing a battery".

(2) Dip the end of a cotton bud in Isopropyl.

(3) Rub over the battery contacts on the rear of the battery several times with the tip of the cotton bud. Pay attention that no cotton residue remains on the contacts.

(4) Repeat this procedure at least three times.

(5) Remove all grease and dirt deposits in the contact area with the help of the alcohol-soaked cleaning cotton bud.

(6) Then use a dry cotton bud and repeat steps 3 to 5.

(7) Spray compressed air onto the plug-connector area and keep the hose, resp. the nozzle about 15 mm above the surface.

Attention!

Do not direct the nozzle onto yourself or other persons. Pay attention that the nozzle does not point towards your face.

(8) Check the area for grease and dirt residue and repeat the cleaning procedure if necessary.

(9) Insert the battery in the MC 95xx^{ex}-NI.

8.3.7 Cleaning the charging station plug-connectors

This is how you clean the plug-connectors of a charging station:

(1) Separate the DC power supply cable from the charging station.

(2) Dip the end of a cotton bud in Isopropyl.

(3) Rub over the contacts of the plug-connector(s) with the tip of the cotton bud. Move the cotton bud slowly from one side of the plug-connector to the other and back again. Pay attention that that no cotton residue remains on the plug-connectors.

(4) All of the plug-connector sides should also be cleaned with the help of the cotton bud.

(5) Spray compressed air onto the plug-connector area and keep the hose, resp. the nozzle about 15 mm above the surface.

Attention!

Do not direct the nozzle onto yourself or other persons. Pay attention that the nozzle does not point towards your face.

(6) Make sure that no lint remains from the cotton buds and remove any lint.

(7) If there are any grease and dirt deposits on other sectors of the charging station, remove this with a lint-free cloth and alcohol.

(8) Allow the alcohol to dry at least 10 to 30 minutes in the air (depending on the ambient temperature and humidity) before you connect the charging station to the power source. The required drying time increases with lower temperature and high humidity. The required drying time decreases with higher temperature and low humidity.

8.3.8 Cleaning interval

The customer must determine the cleaning interval at his own discretion and with consideration of the different environments in which the mobile units are used. The devices can be cleaned at discretionary frequent intervals. When used in very polluted environments it is, however, advisable to clean the scan window regularly to guarantee optimum scan performance.

8.4 Information about Repairs

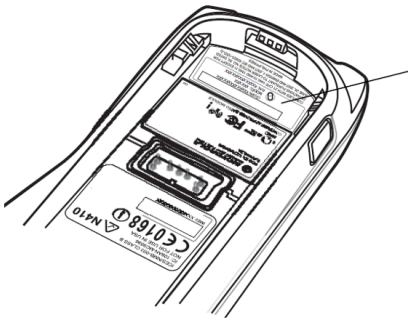
Customer Service Information

If you have problems with your device, please contact the BARTEC sales company or commercial representation responsible for your region. You can find contact information under:

http://www.bartec.de/homepage/eng/10_unternehmen/10_unternehmen/s_10_10_50.asp?C=1

Please have the following information available when you contact BARTEC:

– Serial number of the device (you can find this on the manufacturer label)
– Model number or product name (you can find these on the manufacturer label)
– Software type and version number



BARTEC answers enquiries by email, telephone or fax. If the problem cannot be rectified by the BARTEC sales companies or commercial representations, you may need to return the device to us for maintenance.

If you wish to send in a defective device for repairs please first read the RMA procedure guide. Then fill in and sign the RMA (Return Merchandise Authorisation) form and send it to our "Retouren Centre".

Email: services@bartec.de
Fax: +49 7931 597-119

We cannot guarantee any contractually agreed processing times for devices that are sent in without an RMA number.

The RMA guide and the RMA form are available on our homepage for downloading.

http://www.bartec-group.com
Quality and Culture
RMA Form

Any questions? Send us an e-mail or call us.

E-mail: services@bartec.de
Phone: +49 7931 597-444

9. Accessories

9.1 Accessories for use in hazardous area

Designation	BARTEC Order no.
Battery	
Spare battery	B7-A2Z0-0011
SD card	
Micro SD cards 1 GB	17-C1Z0-0007
Micro SD cards 2 GB	17-C1Z0-0008
Protective display foil	
5 pieces per package	B7-A2Z0-0017
Keypad with overlay (green)	
Spare keypad for	
- with alpha-numeric keypad	05-0080-0498
- with alpha-prime keypad	05-0080-0497
- with numerical phone keypad	05-0080-0496
- with numerical calculator keypad	05-0080-0495
Overlay for keypad (green)	
Spare overlay for MC 95xx^{ex} NI	
- for alpha-numeric keypad	03-9829-0046
- for alpha-prime keypad	03-9829-0047
- for numerical phone keypad	03-9829-0048
- for numerical calculator keypad	03-9829-0049
Screws	
Spare screw for keypad	03-1321-0015
Further Accessories	
Special tool for battery release	03-5510-0008

9.2 Accessories for use in non hazardous area

Designation		MOTOROLA Order no.	BARTEC Order no.
Single Slot USB Cradle			
Single Slot USB Cradle		CRD9500-1000UR	03-9915-0005
without accessories			
Single Slot USB Cradle KIT		CRD9500-101UR	03-9915-0009
Consists	- Single slot USB cradle		
	- Power pack		
Single Slot Charging Station for Spare Battery			
Single Slot Charging Station		SAC9500-1000CR	03-9915-0010
without accessories			
Single Slot Charging Station Kit		SAC9500-101CR	03-9915-0011
Consists	- Single Slot Spare Battery Charging Station		
	- Power pack		
4-Slot Charging Station for Spare Battery			
4-Slot Charging Station		SAC9500-4000CR	03-9915-0006
without accessories			
Power Packs for			
Single slot USB cradle and charging station	AC 100-240 V, DC 12 V, 3.33	KT-14000-148R	03-9911-0015
Quadruple charging station	AC 100-240 V, DC 12 V, 9.0 A	50-14000-241R	03-9911-0021
Cables			
Micro USB Active Sync cable	for single slot USB cradle	25-124330-01R	03-9919-0013
DC Y-cable	allowed connection of a single slot USB cradle and a single slot charging station to a power pack	25-122026-01R	03-9915-0015
DC 4 times cable	allowed connection of a four quadruple charging station to one power pack	25-85992-01R	03-9915-0016
Line cord (EU)		-	03-9609-0013
Line cord (US)		23844-00-00R	03-9609-0021
Further Accessories			
Wall mounting bracket			
	- for 2 4-slot charging	KT-116362-01R	03-9869-0015
	- for 1 4-slot charging	KT-116364-01R	03-9869-0016
Spare Stylus		KT-122016-03R	03-9849-0059
	- for 3 pieces per set		
Spare Handstrap Set		SG-MC9523043-01R	03-9849-0060
	- for 5 pieces per set		
User manual		-	B1-A295-7D0001
	- Mobile Computer Full NI		

10. Order Numbers

10.1 MC 95xx[ex]-NI without WWAN option

B7-A29 [ ] - 0 [ ] 0 D / A [ ] 1 0 0 0 0 [ ]

Explosion Protection	
UL	Class I, II, III Division 2
ATEX	Zone 2 and Zone 22
Data Capture	
SE 950	1D Laser Scan Engine
SE 4500	1D/2D Imager Engine
SE 950	1D Laser with camera
SE 4500	1D/2D Imager with camera
Version Keyboard	
Alpha Numeric Primary Wide	
Alpha Primary	
Numeric Telephony	
Numeric Calculator	
Micor SD Card	
None	
1 GB	
2 GB	

[2] [3]

[A] [B] [C] [D]

[B] [C] [D] [E]

[0] [2] [3]

10.2 MC 95xx[ex]-NI with GPS option

B7-A29 [ ] - 6 [ ] A E / A [ ] 1 0 0 0 0 [ ]

Explosion Protection	
UL	Class I, II, III Division 2
ATEX	Zone 2 and Zone 22
Data Capture	
SE 950	1D Laser Scan Engine
SE 4500	1D/2D Imager Engine
SE 950	1D Laser with camera
SE 4500	1D/2D Imager with camera
Version Keyboard	
Alpha Numeric Primary Wide	
Alpha Primary	
Numeric Telephony	
Numeric Calculator	
Micor SD Card	
None	
1 GB	
2 GB	

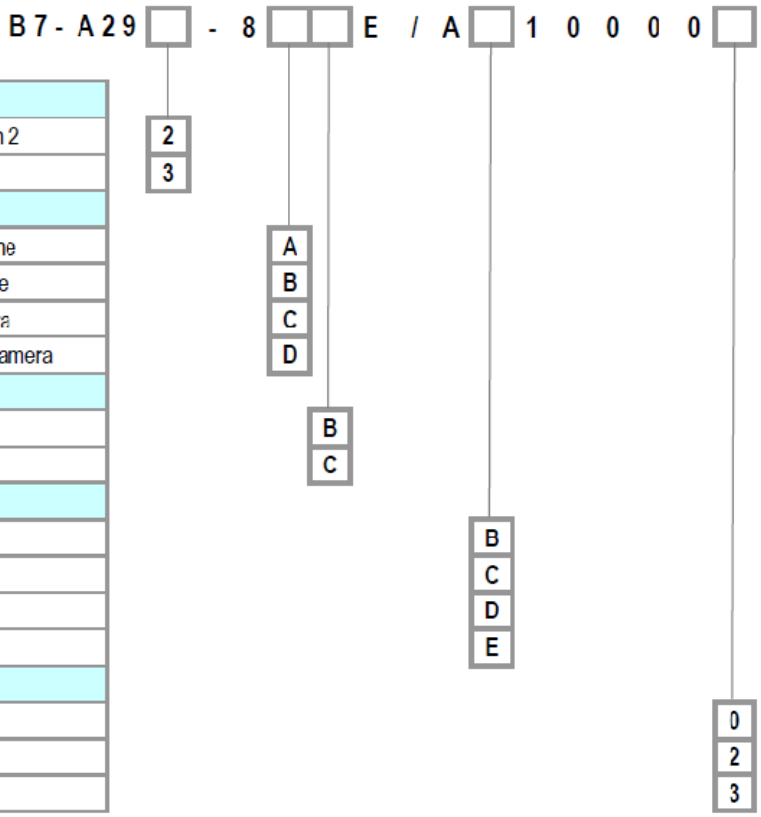
[2] [3]

[A] [B] [C] [D]

[B] [C] [D] [E]

[0] [2] [3]

10.3 MC 95xx^{ex}-NI with CDMA option



Explosion Protection	
UL	Class I, II, III Division 2
ATEX	Zone 2 and Zone 22
Data Capture	
SE 950	1D Laser Scan Engine
SE 4500	1D/2D Imager Engine
SE 950	1D Laser with camera
SE 4500	1D/2D Imager with camera
Voice and Data Transmission	
CDMA/EVD0 Verizon	
CDMA/EVD0 Sprint	
Version Keyboard	
Alpha Numeric Primary Wide	
Alpha Primary	
Numeric Telephony	
Numeric Calculator	
Micro SD Card	
None	
1 GB	
2 GB	

11. Disposal

The component of the Mobile Computers contains metal, plastic parts and electronic components.

The statutory requirements for electrical scrap must be observed therefore (e.g. disposal by an approved disposal company).

12. Dispatch and Packaging Instructions

Important information regarding transport and dispatch

! Sensitive Devices!

It is absolutely necessary to deliver the equipment in the original packaging in order to avoid damage to the equipment.

13. Additional Information

13.1 Links

http://www.bartec-group.com BARTEC Homepage

http://www.motorola.com/web/Business/CT/Enterprise+Mobility.htm Motorola Homepage

The Motorola page for the MC9500-K User Manuals of the non-explosion protected version

- Support
- Product Manuals
- Mobile Computers
- MC9500-K
- Click on “More” for complete list

The Motorola page for the MC9500-K software of the non-explosion protected version

- Support
- Enterprise Mobility => Download Software
- Software Download
- Mobile Computers
- MC9500-K
- Click on “More” for complete list

http://www.symbol.com/

The Motorola product information page for the MC9500-K of the non-explosion protected version

Business Products & Services

Mobile Computers

Handheld Computers

MC9500-K Premium Industrial-Class Rugged Mobile Computer

http://www.symbol.com/products/oem/oem_scan_engine_data_sheet.html

The Motorola page for the Scan Engine which is used in the MC 75Ax[ex] – NI series.

- Business Products & Services
- OEM
- Imager
- Symbol SE4500 OEM Imaging Engine
- OEM
- Laser
- Symbol SE95 OEM Laser Scan Engine

https://devcentral.motorola.com/login.aspx?p=/Default.aspx

The Motorola Developer Central page for software developers.
Tools, Updates, Patches etc. or the individual symbol products can be found on this page.

It is necessary to register to get access to the pages. Registration is free of charge.

http://www.microsoft.com

Microsoft Site for Active Sync or Windows Mobile Device Center for Windows Vista and Windows 7

Erklärung der Konformität
Declaration of Conformity
Attestation de conformité

Nº **B1-A293-7C0001**

BARTEC GmbH
Max-Eyth-Straße 16
97980 Bad Mergentheim
Germany

Wir	We	Nous
BARTEC GmbH,		
erklären in alleiniger Verantwortung, dass das Produkt	declare under our sole responsibility that the product	attestons sous notre seule responsabilité que le produit
MC95xx^{ex}-NI	**MC95xx^{ex}-NI**	**MC95xx^{ex}-NI**

Typenbezeichnung : B7-A293-**/SW********

auf das sich diese Erklärung bezieht den Anforderungen der folgenden **Richtlinien (RL)** entspricht	to which this declaration relates is in accordance with the provision of the following **directives (D)**	se référant à cette attestation correspond aux dispositions des **directives (D)** suivantes
ATEX-Richtlinie 94/9/EG	**ATEX-Directive 94/9/EC**	**ATEX-Directive 94/9/CE**
EMV-Richtlinie 2004/108/EG	**EMC-Directive 2004/108/EC**	**CEM-Directive 2004/108/CE.**
RoHS-Richtlinie 2002/95/EG	**RoHS Directive 2002/95/EC**	**Directive Européenne de RoHS 2002/95/CE**
und mit folgenden Normen oder normativen Dokumenten übereinstimmt	and is in conformity with the following standards or other normative documents	et est conforme aux normes ou documents normatifs ci-dessous
EN 60079-0:2009	EN 301 511: V9.0.2	EN 50360:2001 (Max average 10g SAR 0.470 W/Kg)
EN 60079-11:2007	3GPP TS 51.010-1 v.8.2.0 (GSM 11.10-1)	EN 50371:2002
EN 61241-0:2006	EN 301 908-1 V3.2.1	EN 62311:2008
EN 61241-1:2004	EN 301 908-2 V2.2.1	FCC 47CFR Part2; OET Bulletin 65c
EN 301 489-1 V1.8.1,	3GPP TS 34.121	RSS 102 Issue 2
IEC Class2 Laser Product	3GPP TS 34.123	IEC Class2 Laser Product
EN 60825-1:1994 +A1:1997 +A2:2001	EN 300 328 V1.7.1	IEC 60825-1:1993 +A1:2001 +A2:2001

page 1 of 2

Erklärung der Konformität
Declaration of Conformity
Attestation de conformité

BARTEC

BARTEC GmbH
Max-Eyth-Straße 16
97980 Bad Mergentheim
Germany

Nº **B1-A293-7C0001**

EN 61000-3-2:2006 (ClassA)	47 CFR Part 15, Subpart B, Class B	ICES 003 Issue4, ClassB
21CFR1040.10 ClassIIa or II	EN 300 440-2 V1.2.1	21CFR1040.10 ClassIIa or II
EN 61000-3-3:1995 +A1:2001 +A2:2005	EN301 489-7 V1.3.1	EN 301 893 V1.4.1

Kennzeichnung	**Marking**	**Marquage**
Ⓔx II 3G Ex ic IIC T6 Ⓔx II 3D Ex tD A22 IP64 T90°C -20°C ≤ Ta ≤ +50°C		

Verfahren der internen Fertigungs-kontrolle	**Procedure of internal control of Production**	**Procédure de contrôle interne de fabrication**

CE

Bad Mergentheim, den 28.02.2011

ppa. Ewald Warmuth
Geschäftsleitung / General Manager

page 2 of 2

Certificate of Compliance

Certificate Number 20101119-E321557
Report Reference E321557, 2010 October 02
Issue Date 2010 November 19

Underwriters Laboratories

Issued to: BARTEC GMBH

Max-Eyth-Strasse 16
Bad Mergentheim, 97980 Germany

This is to certify that representative samples of INFORMATION TECHNOLOGY EQUIPMENT FOR USE IN HAZARDOUS LOCATIONS
See Addendum for model designations.

Have been investigated by Underwriters Laboratories in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety:
ANSI/ISA 12.12.01-2007
UL 60950-1, 2nd Edition
CSA C22.2 No. 213-M1987
CSA C22.2 No. 60950-1-07

Additional Information: See UL On-line Certification Directory at WWW.UL.COM for additional information.

Only those products bearing the UL Listing Mark for the US and Canada should be considered as being covered by UL's Listing and Follow-Up Service meeting the appropriate requirements for US and Canada.

The UL Listing Mark for the US and Canada generally includes: the UL in a circle symbol with "C" and "US" identifiers: c UL us the word "LISTED"; a control number (may be alphanumeric) assigned by UL; and the product category name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product

William R. Carney
Director, North American Certification Programs

Underwriters Laboratories Inc.
Any information and documentation involving UL Mark services are provided on behalf of Underwriters Laboratories Inc. (UL) or any authorized licensee of UL.

For questions, please contact a local UL Customer Service Representative at http://www.ul.com/global/eng/pages/corporate/contactus/

Certificate of Compliance

Certificate Number 20101119-E321557
Report Reference E321557, 2010 October 02
Issue Date 2010 November 19

Underwriters Laboratories

This is to verify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Class I, Division 2, Groups A, B, C, and D Hazardous Locations:
Handheld Mobile Computer Model MC95ex-NI-B7-A291, followed by 0, 6 or 8, followed by A, B, C or D, followed by O, A, B or C, followed by any letter, followed by any letter, followed by B, C, D or E, followed by 0 or 1, followed by 00, followed by any number between 000-999

Class I, Division 2, Groups A, B, C, and D; Class II, Division 2, Groups F and G; Class III Hazardous Locations:
Handheld Mobile Computer Model MC95ex-NI-B7-A292, followed by 0, 6 or 8, followed by A, B, C or D, followed by O, A, B or C, followed by any letter, followed by any letter, followed by B, C, D or E, followed by 0 or 1, followed by 00, followed by any number between 000-999

William R. Carney
Director, North American Certification Programs
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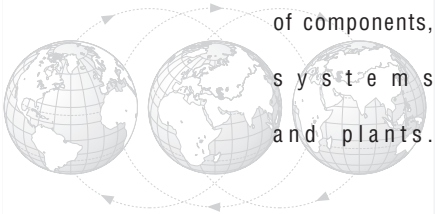
BARTEC

BARTEC protects people and the environment by the safety of components, systems and plants.



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B1-A290-700001-10.03.2011-Rev.1